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EXERCISES IN ECONOMICS

By
W. G. Langworthy Taylor

For
Colleges, High Schools,
and Independent Students

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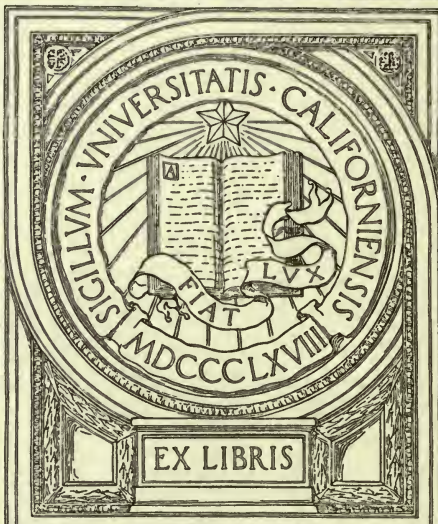

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WRITE YOUR OWN POLITICAL ECONOMY

EXERCISES

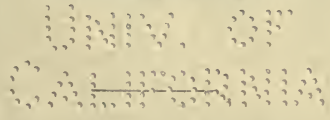
FOR

COLLEGES, HIGH SCHOOLS, AND INDEPENDENT STUDENTS

By

W. G. Langworthy Taylor

Professor of Political Economy and Sociology in the University of Nebraska



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INTRODUCTION

ON THE STUDY OF POLITICAL ECONOMY IN THE HIGH SCHOOLS

I.

In this introduction no attempt is to be made to dictate a curriculum for the high schools. It will simply be shown that the public and Science are both ready for the introduction of political economy into the high schools, and that the methods of political economy are sufficiently developed to allow such introduction.

The public is ready and for a long time has been ready for economic instruction. If the subject of economics has been surrounded by violent prejudices, by class and party hatred, that has only the more emphasized the necessity that it should develop its methods of instruction. The passions alluded to, however, have made it much more difficult for economics to develop a method than for other sciences. In the natural sciences, the method of investigation has practically suggested the method of instruction; in history, method has come later, because of the feelings clustering about historical topics; and in political economy the difficulty has been still greater.

Education is the acquiring of self-consciousness about everything that affects our career. Our career is to be taken in the broadest sense as embracing

both the individual and society. But self-consciousness can only arise when a certain power of distinguishing fact from fiction, history from legend, reality from imagination, the objective from the subjective, is acquired, and this power only comes when sentiment, passion, or even undue feeling is banished or repressed. Naturally, it is concerning the most important things that sentiment lingers longest and passions swell up strongest. Hence it happens that in the history of culture it is the most important subjects, the social phenomena, that are the last to attain to due scientific precision in thought.

But the great hindrance in the teaching of political economy has lain in the inherent difficulty of the subject, for it requires the most intense employment of deductive thought. In other words, it carries the mind beyond the ordinary chain of reasoning employed by the ordinary business man. There is nothing that people shrink from so much as exerting their minds beyond the ordinary line of effort. Most men will rather go without a meal than attempt the effort necessary to consecutive thinking. As Professor Macvane[1] suggests, the test of the difficulty is in the length of time taken into view. When considering public matters, business men embrace only the same length of time that they embrace in considering their private affairs. Now, for the operation and working out of public affairs and of public interests, a longer lapse of time is necessarily involved; and the whole

[1] "The Economists and the Public," S. M. Macvane, the *Quarterly Journal of Economics*, Jan., 1895.

difficulty will be found to turn about the greater effort necessary to trace the influences that enter into the longer period.

Many evil consequences flow from the lack of recognition of the difference in the reasoning necessary in public and in private business: for example, nothing is more common than the claim that economists are "theorists," and that their conclusions do not correspond with the facts. This claim may be refuted in various ways. In the first place, it is extremely absurd to suppose that if a man devotes his whole life to investigation along economic lines, the necessary consequence is that he knows less than a man who has paid no especial attention to economic thought. In the second place, the objection is founded upon a total misapprehension as to what the consequences inferred by economists are. The person who makes the objection is not yet ready to understand an economic conclusion, and therefore puts into the mouths of economists what does not belong there. And, in the third place, the claim that economists do not pay attention to the facts can be met by a complete *tu quoque*—it is the haphazard thinker that does not pay attention to the facts.

Nevertheless, with the rise of scientific thought in matters pertaining to outer nature, it has become more and more possible to reason calmly and more exactly upon matters pertaining to our inner nature and to society. The ability to objectify overflows, by sheer surplus of energy, from natural science upon the field of industrial, mercantile, and domestic interests.

This is shown by the fact that in our universities six times as many hours were devoted to economic instruction in 1892 as in 1876.[1] The present number must be much greater. This attention to economics is beginning to find its way from the universities into the high schools, and more especially into the high schools of the West. It may be that the high schools of the East are wise in leaving economic studies to the universities, but at least the public demand and the interest of teachers are manifested by the movement that has taken place in the West. This movement, however, has as yet not nearly attained the importance which the subject and the interest in the subject demand, and it is our business here to further it. Our economic life is the basis of all of our life. Without it we should have no higher life. It is thanks to the great inventions, to the organization of labor, and to the great increase of production that we are able to progress in religion, in morals, and in esthetics. Our morals are therefore in a sense the effect of our environment. A science which looks upon the environment as the cause, and upon the standard of living, in the broadest sense, as the effect must afford fundamental training in social thought.[2]

II.

A few words will now be appropriate in order to show that the science itself has reached a point where it is abreast of other sciences and therefore prepared

[1] "The Study of Political Economy in the United States," J. Laurence Laughlin, *The Journal of Political Economy*, Dec., 1892.

[2] "The Theory of Social Forces," sec. 1, Simon N. Patten.

to claim its share in moulding the whole educational curriculum, from the district school up through the university. The economic period of history has appeared last. We have seen that the passions of men have been with much difficulty subdued upon questions to which economic thought is vital. It may easily be perceived why economics, regarded as an item in the development of science in general, has reached a late perfection. Economics requires, as a condition precedent to its development, a high degree of perfection in the methods of all the other sciences; indeed, in the first place it required the development of a separate subject-matter; it required a distinct industrial life, which only became dominant in the last part of the eighteenth century. As already remarked, the power of dispassionate reasoning was perhaps first cultivated through the natural sciences. Moreover, the natural sciences promoted those habits of observation and of induction which are necessary to economics. Nevertheless, economics rose rapidly upon the heels of the natural sciences, and already in the first half of the present century the declaration was not uncommon that the science of political economy was now perfect. This statement proves to have been a foolish one. A science can never be perfect so long as it remains a science. The complex of cause and effect can never be fathomed by man, and economics is now progressing more rapidly than ever. What would you say of zoology or botany, if an eminent student of those sciences should declare that they were now perfect? The charge,

therefore, that political economy is not complete is not intelligently made. The charge that it is not as complete as other sciences is ignorantly made. Political economy will probably respond to every test that can be made of a science. Its conclusions are as true as those of any other science. They are no more hypothetical than those of any other social science. If capacity for mathematical measurements be taken as the test of a science, political economy is fully equal to the test. It has arisen as a science should arise, first with private students, then spreading into the universities, which are the seats of original investigation, and gradually making its way down through the various grades; and it is in these processes of dissemination from the top through the whole structure that we are now engaged.

III.

There is no doubt that the public is ready and even eager for economic instruction. There is equally little question that the science of economics has already attained to the full stature of a science, and that in point of maturity and completeness it does not need to give way to any other science, whether so-called "natural" or "social." The only question, therefore, remaining to be considered is the very important one of method of instruction. It is one thing to pursue knowledge for its own sake, and quite another thing to impart the results attained. In this question of method of instruction, a movement is now taking

place that is destined to fulfil all requirements, so that we are justified in saying that economics is now almost complete as a branch of education.

In order to choose the proper method, it will be necessary for us to take a glance at the various departments of the science itself. For our purpose, two kinds of economics may be recognized: the one consisting of those psychological studies which involve metaphysical powers of generalization and the distinction between subjective and objective; which presuppose a mathematical training and lead up to a complicated conception of organic life. This kind of economics is evidently fitted for the university alone. The work of classification of economic phenomena,—that is to say, the work of research and investigation undertaken by our candidates for the second and third degrees,—is of course also only to be undertaken by mature minds and hence restricted to the university.

There is, however, another kind of economics which belongs to the earlier stages of the science, and which is therefore perhaps better adapted to the earlier stages of the growth of the individual mind. This economics is suited to the lower college classes and to the last years of the high school. It is the economics of the so-called "orthodox school." Perhaps the statement that this kind of economics is adapted to the class of students mentioned may cause some surprise, and I hasten to add that it should not be taught in the ordinary way and with the mere use of a standard treatise as a text-book.

Before further explanation of the proper method of

teaching orthodox economics, I should not omit to state that a third and lower stage of economic instruction is possible. This is adapted to the lower grades, to graded, and even to district schools. It consists in simple applications of the results of the psychological economics pursued in the university. A study of these methods would amply repay every teacher. How far teachers who are not students of economics would appreciate these methods I am unable to say. I would advise them, however, to make the experiment of applying them if possible. The whole suggestion comes from Professor Simon N. Patten,[1] and I cite some of the topics which he suggests for primary instruction: "initial and final utility," e. g., if a boy eat two apples, the second apple gives less satisfaction than the first, but if the second be given to another boy, the other boy will get as much satisfaction as the first apple gives to the first boy; "in a group of pleasures and pains, the pains should precede the pleasures," i. e., pains grow if deferred, and deferred pleasures are also greater than immediate ones; "a life of unalloyed pleasure," i. e., the most intense pleasures are selfish and solitary, while combined pleasures involving some pain give a greater total surplus; "the basis of credit," i. e., trust, honor; "the sacredness of unprotected property," i. e., the basis of all our advantages from association; "the harmony of consumption," i. e., many combined elements give a better result than single pleasures,—the

[1] "Economics in the Elementary Schools," Simon N. Patten, *Annals of the Am. Academy of Political and Social Science*, Jan., 1895.

mind learns to make esthetic associations; "the ejection of discordant elements"; "group pleasures should be given the preference above individual pleasures"; "the right of exclusion."

Returning now to the proper subject of exposition, —the method of instruction suitable to the high schools, to the colleges, and to the lower classes of the university,—two paths are open to us. The first path has been already mentioned, the teaching of orthodox economics. It is true that the mental effort involved in complicated logical demonstrations is very great, so great that in the present state of preparation of students for this work, colleges are generally able to undertake it only in the junior year. As presented by John Stuart Mill and by the other approved text-writers, it is doubtful if this sort of political economy can ever be taught to persons younger than juniors, *unless* the teacher himself is an economist of long training. In that case, it is not Mill but the teacher who instructs; and yet, as has been already remarked, this kind of economics is in a way suited for young minds, for it is not so much a system of philosophy as a systematized refutation of popular fallacies from a rather materialistic point of view. The logic of the street-corner and hustings is employed with greater precision than at the street-corner and hustings, with the result of modifying or overthrowing many of the conclusions there reached. It is simply a case of carrying out with plenty of time and ample deliberation the same argument which is too hastily pursued in popular dis-

cussion and in "campaigns of education." Mill contains no attempts at metaphysical refinement, at absolute standards, and at exact measurements. He systematically controverts half-logic and half-education. Nevertheless, Mill can not be otherwise than extremely hard even to the trained mind, notwithstanding his clearness and beauty of diction. The question arises therefore whether work like his may not be presented in better form for beginners.

It has occurred to the present writer that the question is not so much one of simplification of Mill as it is one of avoiding *fixed conclusions.* The great trouble in economic instruction is that the student is apt to reach premature practical conclusions. He is apt to take a bias in favor of free trade or of protection, in favor of one system of taxation or of another; and this bias unfits him for further economic work. He is apt to think that he "knows it all," that he does not need further economic instruction, and that he has mastered the science, whereas, as a matter of fact, he has hardly touched its threshold. In order to avoid premature conclusions, which are apt to be intensified by lack of experience on the part of teachers, it has occurred to the present writer that the deductive reasoning of the orthodox school may be, as it were, *inductively* taught. He has therefore tried the experiment of having students write their own political economy. The principal topics of production and distribution are proposed as subjects for essays. A dozen or twenty suggestions are made under each topic as to

how it may be treated. The student is then required to make an internal inspection of his own experiences and observations with respect to a given topic and to write an essay in view of his own experiences and with the help of the suggestions offered. The teacher, in giving out the topic and suggestions, adds suggestions of his own. The essay when completed is subjected to criticism. All comment on the political bias of the writer is studiously avoided. The criticism is confined purely to a discussion of misstatements of fact or of failures of logic. As in the science itself, so in the special topic, there are no hard and fast conclusions. The mind of the student has been exercised and made flexible and curious with respect to the topic. That is a sufficient result. He will be eager for further discussion and for further instruction. If he does not go up to the university, but goes directly from the high school to business, this curiosity will follow him, nevertheless, through life, and his habits of systematic argument formed in the high school or college will make him a more conservative citizen than he otherwise would have been.

The danger of instruction in economics by teachers who are not themselves economists is very great. I believe such instruction has had much to do with the small effects of economic teaching upon public opinion.[1] How can it be expected that, when teachers are not thoroughly trained in economics, they can turn out pupils with broad views, free from prejudice, and

[1] "The Problem of Economic Education," Simon Newcomb, the *Quarterly Journal of Economics*, July, 1893.

ready to learn from every new experience? The introduction, therefore, of this sort of economics, i. e., the deductive economics of the orthodox school, is qualified by the difficulty of obtaining teachers who are specially trained. The following exercises, offered by the present writer, will, it is hoped, be useful in the hands both of those who are and of those who are not specialists in economics.

I now come to another possible method of instruction in the field of political economy and preparatory to the science itself—commercial geography and industrial history. I prefer to include this subject under the title, "economic history." The suggestion is that economic history may properly form a part of the curriculum of the high school in the preparation for the study of political economy in the university, and as a substitute for political economy for the high school students who do not expect to attend the university. The importance of economic history is great, although it may be exaggerated. Indeed, a school of economists grew up who, inconsistent as it may seem, rejected what I have been calling political economy, and proposed economic history as the sole economic study. A very warm controversy existed between the new and the old schools, which ended in a spirit of mutual recognition and reconciliation. The fact is that economics as a science must be closely allied with special investigations into statistics and history; and it is no wonder that some of the persons who have devoted themselves to these investigations should end by finding in them the whole science. With these dis-

cussions we have nothing to do except in so far as they serve to emphasize the importance of economic history. It has already been shown that serious difficulties attend instruction in political economy—even the political economy of the argumentative schools of Mill and Ricardo. The first great advantage, therefore, in the substitution of economic history for political economy, is that so severe mental preparation on the part of the teacher is not necessary.

The second advantage from the study of economic history is that it is an excellent preparation for the subsequent study of political economy. Economic history is no other than the collection and placing by themselves of the economic facts in history: the industrial revolutions wrought by the great inventions, the changes in the course of commerce, the changes in the organization of industry and in its connection with civic family life, the changes in the habits and standard of living of the every-day people, the new methods of transportation, etc. This study may even be investigated historically by the method of original sources. Again, the students may be required to report upon the agricultural or manufacturing industries found in their neighborhood, to classify them, to investigate the habits of life of the people about them, and to record them simply as matters of fact useful for future reference. These studies, however, are not to be pursued as a training in the "source method" nor as a training in distinguishing "what is a fact." That excellent work economics leaves to the department of history. Certainly, eco-

nomic history should assist political history in all of its purposes and as surely will the former be assisted by the latter. The study of economic history from good authorities should give the high school student a fund of knowledge as to industrial, commercial, and social development which will be useful to him through life. If he pass through the high school to the university, he will be prepared to study political economy, that is, to reason carefully and exhaustively upon the facts already familiar to him, and to deduce laws which he has already inductively suspected. If he go directly from the high school to business life, he will retain forever a strong impression of the lessons of history and will thereby be rendered a more conservative and solid citizen.

If history is a study of facts, then political economy is a study of reasons. Political economy is essentially analytic, and political economy and history must necessarily supplement each other in the formation of a comprehensive conception of society.

I have now presented the two economic studies which seem to me to be suitable for introduction into the high school and lower college classes. Of the two, I recommend most unreservedly economic history for high schools. It is perhaps less liable to abuse and misuse and more satisfactory to young minds. Political economy, properly so-called, I recommend chiefly for large high schools and colleges where the principal or some teacher has had economic training at the university; and even in such cases it should be taught with care and with full con-

sciousness of the danger of creating premature bias in the minds of the students. The importance of economic studies is incontrovertible. The only question is as to the possibility of making of these a popular education. Education is not primarily composed of the branches most important to man's well being, but of those branches which have been sufficiently developed so that they may be taught among the developed branches. The choice is *then,* and then only, governed by relative importance with respect to man's well being. Since political economy is sufficiently developed to serve the purposes of instruction, it must necessarily be chosen as perhaps the most important subject connected with man's well being. It treats of the basis of his whole higher career, which would be impossible without an industrial foundation. It has heretofore been excluded from the curriculum by a compromise which acknowledged its importance but denied its development. This argument can no longer stand against it, and nothing can prevent the shaping of the whole educational system with reference to it.

The high schools offer courses in civics and in history. Why not in economics, or at least in economic history? It is true that multiplicity of courses in the high schools is inadvisable. Surely all fads of instruction must give way to economics, which is the most developed of the sciences treating the universal foundation of both individual and social life.

The high schools must be portions of an organic

educational unity[1] so arranged that the pupil may proceed most expeditiously and thoroughly from the lowest to the highest branches of knowledge, and yet so arranged that if the pupil drop out at any stage he may have gained the greatest possible advantage from the length of time already devoted to study. In such a scheme our proposed methods of instruction fit completely.[2]

A partial list of works on economic history will be found in the appendix.

[1] "The High School System," L. R. Harley, *Annals of the Am. Academy of Political and Social Science*, Sept. 1896.

[2] "Economics as a School Study," Frederick R. Clow, *Economic Studies, Am. Economic Association*, June, 1899. (Price 50c.)

WRITE YOUR OWN POLITICAL ECONOMY

A WORD TO TEACHERS

THE title of this book indicates the method pursued. It does not indicate the method of thought but the method of instruction; it indicates further that the instruction is intended to be self-instruction. Since, moreover, there can be no instruction which is not essentially self-instruction, a certain form of endeavor is here esteemed best to accomplish self-instruction of the beginner. This is a form which will call forth his activities and thus illustrate at the outset the principle that man's activity, even more than his wants, is calculated to further his progress. The stimulation of mental effort is sought to be promoted by written exercises. These exercises consist, so far as the contribution of the teacher is concerned, in titles suggestive of crucial economic topics, and also in some dozen suggestions for the treatment of each exercise. The primary intention is that the exercises be, on the part of the student, an original analysis of the situation suggested. Whether he be encouraged to read the text-writers for assistance in his analysis, or be discouraged in seeking for aid outside of his own consciousness, or, at most, outside of discussion with parents and comrades, will depend upon his stage of advancement.

Doubtless it is preferable that separate sets of exercises be composed in the future for different ages and capacities. Since, however, it is believed that progress can only be made through internal spontaneity of thought, it is better that, in all cases of doubt, recourse to the text-writers be discouraged, and that only in exceptional cases of strong and advanced minds in whom the critical faculty has already some development such reference be permitted.

The teacher should first discuss the exercises before the class, including the suggestions (*a*), (*b*), (*c*), etc. On a subsequent day, the students should bring in their original essays. In no case should the documents handed in be allowed to consist of a series of categorical answers to the suggestions accompanying the exercises, nor should they be confined to the suggestions, but should include as many new points as the students can think of. In the case of each student, there must be an original purposive arrangement of materials calculated to demonstrate a central theory which has germinated in his mind. The students must therefore avoid discussing the suggestions in the order in which they are given. In other words, they are to follow the obvious principles governing the construction of a literary essay; and it will be found that the intense human bearing of the subjects discussed will exert a most beneficial influence upon the ability of the students to employ language and expression. Experience has demonstrated that economic exercises assist the teacher of English at least as much as English studies and rhetorical instruction assist the teacher of economics.

When the essays have been read by the teacher, a general criticism upon the tendencies observed in them may be made before the class. It is here that the greatest discretion and prudence are required, for the danger is very great that pupils be encouraged in making some final conclusion. That such conclusion might redound to the credit of this or that political party is neither here nor there; for whoever undertakes economic instruction should hold himself above the breath of suspicion of current political bias or affiliation. Of the danger of partisanship, therefore, it is superfluous to speak. The other danger—that of preconceived conclusions—has a real pedagogic interest. The merit that is believed to lie in the self-instruction herein advocated is precisely this, that if the method be properly employed the student will be impressed with the fact that he has begun the study of a large and ever-widening subject, which reaches down into the fundamental facts of human existence, and with which he has only begun to familiarize himself as a field of study, without any presumption of finally settling any question.

Usually three topics will be presented under a single title. Each topic is for a separate student-essay; but the titles will be discussed in the text as a whole and with little or no reference to the separate essay-topics.

Those wishing to purchase standard works to read in connection with these topics are recommended to the following: Marshall's Principles of Economics

(fourth ed.), Hadley's Economics, Davenport's Outlines of Economic Theory, Davenport's Elementary Economics, Boehm-Bawerk's Positive Theory of Capital, and, of course, John Stuart Mill (Laughlin's ed.).

CHAPTER I

FLUCTUATING PRICES

THE question naturally arises why separate titles have been adopted for *fluctuating* and for *steady* prices. Surely, it will be said, there must be some one principle which governs in all questions of price. The objection is true in one sense and untrue in another. It is true in the sense that we are justified in always looking for a central principle in any group of phenomena that presents itself. We have a right to assume that the phenomena are grouped together because they belong together naturally, and that some natural characteristic may be found common to the group. Now, prices evidently form such a group, and if we seek to break the group up into two are we not frustrating our object?

The answer is that, admitting, and even strongly affirming, the necessity of central principles, it must also be borne in mind that a generalization may be too broad for practical utility; for, after all, we seek to *understand,* and it is possible that a generalization may be too broad to illuminate our understanding. It must always be borne in mind that a generalization is a human and finite method of progress. If we may consider progress to consist in the learning of truth and in those changes within the thinker that accom-

pany increased knowledge, then we must look upon "general" reasoning as a mere method whereby a certain characteristic common to all the individuals of a group is made to represent them. It will, therefore, be seen that the breadth of the generalization that should be made is a practical question depending upon the nearness to reality and the vividness of imagination that flow from it.

Now, if we attempt to subsume the whole topic of value under the head of a single explanation, it will be found that that explanation will fail in vividness and reality, especially for the beginner, because it can be nothing that is peculiar to the economic field, but only something that is common to all organic life. In other words, it can be nothing else than a general principle of adjustment, known to prevail everywhere and always, to which biological rather than social or economic science has most loudly called attention.

It is true that value is the central point of the science of political economy; in fact, *is* the science. It is the central concept of adjustment, from which the explanations of all phenomena of industry radiate like the spokes from the hub of a wheel. Such a central point at once is a mental necessity, and represents an outward fact. It is a mental necessity because, as above implied, all reasoning is representative, that is to say, we analyze by letting some characteristic represent the whole, and by then observing resulting relations. An example drawn from common experience will sufficiently substantiate this statement. A landscape produces an effect upon a traveler sufficient for

most purposes of art or industry, although it is impossible that he either physically see or mentally apprehend each leaf and each blade of grass. Nature provides for him a short-cut by allowing him to generalize in the physical act of seeing and in the mental acts that correspond. Science proceeds upon the same natural principles and seeks to use practicable substitutes to supply the place of the limited senses with which we are endowed.

It follows naturally, then, that if we choose a certain field of investigation, like political economy, over which we can not at first cast a sweeping and satisfying, comprehensive glance, we can, at least, take parts of the field and pursue within them severally our representative process, and may then even assemble our representative concepts and try to find in turn what is common in *them,* thus pursuing a *re-representative* process, or a representative process of the second degree. Thus the field of analysis in economics is very broad, and it does not follow, because one has not made the last analysis, that therefore he has not made progress.

One difficulty in too broad a generalization being that it is not sufficiently characteristic of the special field of inquiry, it is therefore well to take up different part-fields, where we shall be more sure to discover characteristic principles. One way of doing this is to consider separately those cases in which we notice the most frequency and extent of oscillation in prices. By separating these cases from those in which we have observed prices to be most stable, we shall be

able to select interesting distinctions of principle and influence. Undoubtedly the analogy of physics is the most useful to us, and we shall obtain great assistance from the habit of looking upon economic influences as *forces*. We must remember, however, that we are dealing with the kingdom of mind and not with the kingdom of matter, and this reservation will be the occasion of fruitful discussion in the numberless cases in which we shall have to call in the physical analogy.

It is true that in almost any business a *daily* or even *hourly* fluctuation of prices may be observed, while in the same business it is possible to conclude that, *on the whole,* prices average so and so with little change. In other businesses, little dependence may be placed on the general level of prices in the long run; and in still others, there is slight daily fluctuation.

In trading a rifle for a canoe, in selling a by-product of industry, such as corn-cobs, or in dealing in the fish market, affected as it is by the run of fish, the weather, and the occurrence of religious feast days, we may seek to investigate the simpler influences connected with prices. We should here begin our investigation with the physical environment, and we shall naturally find that it is such as accompanies the less complicated phases of civilization. Each of the concrete topics is drawn from industrial conditions that have existed most exclusively before the industrial revolution took place one hundred and fifty years ago, not to speak of more modern improvements, and that still exist on the frontiers of industry. Let the student endeavor to enumerate all of the symp-

toms of a stage of industry so little advanced as the one implied; not only the inventions for production, but the methods of life, of consumption, of recreation, and even of political and religious thought. He will then perceive that these different phases of life are not independent, and that in following back the single category of economics, he is losing most of the whole view of life in order to gain more of one side of it, and thus ultimately to know more of all. If now he seek the most important distinction for his purpose between the old and the new civilizations, he will find that the element of Time is preponderant. Under primitive conditions, short calculations are made, and therefore we are enabled to study the circumstances that affect prices in two widely separated environments by noting that environment which is characterized by short and that which is characterized by long calculations.

This way of dividing the subject on a time-basis may not be the best, but it is at least scientific, for it adheres strictly to the facts. By noting carefully our environment, we come finally to perceive that all of the phenomena which we find existing together *at one time* are characteristic of each other, so that if one of the phenomena be given to us, the others may be supplied. In this way, the paleontologist will, from a fossil tooth or femur, reconstruct for you a marvelous creature, with an assurance that inspires confidence; or the horse-wrangler on a Dakota ranch will tell you, as soon as he discerns and recognizes one animal roaming far from the "bunch," which are its

comrades that are likely to be found hidden behind the nearest "divide."

While the primitive economy excludes inquiries respecting the industrial forces that play in Time, it leaves us, for this very reason, free to weigh other motives. A price that is not affected by previous calculations must be the result of circumstances in which the parties find themselves suddenly.

And, first of all, let us inquire what is the nature of the subject matter with which we are dealing: does it belong to the world of matter or to that of mind? It is true that the frontiersmen exchange a canoe against a rifle and a pair of moccasins: all material substances and industrial products. In their own minds, the advantages of the "sale" may appear materialistic, for by means of the canoe the one man may perform a journey, the object of which may be the exchange of peltry for groceries, while with the rifle the other man may intend to stock his larder with venison.

It does not concern us, however, what theories they have about their acts; it is our business to make theories, not theirs. But what does concern us is the consideration that we are not dealing with these material products, but with the *intentions* of the men with respect to them and with respect to each other, and with their feelings in connection with the material objects and with each other. Feelings and intentions are not material things, and with feelings and intentions we have solely to do.

Again, we are not called upon to treat of all the causes of feelings and intentions, except so far as we

need a background for our picture. It is evident that the intention to take a trip for the purpose of trading may depend upon infinite moral and physical influences, upon the sense of decent well being, on family duty, upon the changing of the seasons; such studies are beyond our specialty. We must confine ourselves to the inquiry as to how given motives work, and as to what is their nature when once created from whatever origin.

The economic act is the trade. The economic motive is that of advantage, whatever be the principles, moral or customary, which form an ideal or type of advantage within the trader's mind. He does not necessarily seek the disadvantage of his opponent; it is sufficient to suppose him to seek his own advantage. Advantage, when used in this connection, is usually represented by the term "utility." Now we can not consider utility to him as inhering in the material object, e. g., the canoe. We find the utility, not in the canoe, but in the man. If we found it in the canoe, and if we were to say that if the canoe were absent the utility would cease, and therefore the utility is inherent in the canoe, we should have to conclude that two canoes would contain twice the utility of one canoe; three canoes, three times the utility, and so on; whereas the slightest observation shows that the probability is that the utility of the several canoes would decrease as their number increased, although it is again possible that under exceptional circumstances the contrary might hold true. We must therefore always go to the minds of the parties for our ultimate

economic facts, for it is there alone that we can *measure* the forces which control the material objects of trade, and which are called into being perhaps by those objects. It is perhaps true that even as investigators our attention was first stimulated by material objects; but we soon find that they are not the subject matter to be handled.

The confusion that exists in the popular mind between utilitarianism and materialism is thus disclosed and explained. Utility is the relation of human desire and human welfare with respect to an object; and since it is human desire and human welfare that concern us, we must look for our subject rather within the minds of industrial men and not in material objects. A utility may be materialistic in its origin; but it is psychic in its nature.

Accurate analysis involves the idea of *measurement,* and it is the close association of measurement with physical objects that conspires to chain our minds to them. There is, however, no reason why measurement should not be as accurate in the case of a thought, motive, or feeling as in the case of a tree. A test of the perfection of a science is certainly the grade of mathematical accuracy to which it has attained, and since we are, in economics, only dealing with the mind, all that is necessary is that we be able to affirm that one motive is as strong as, or is twice as strong as another. Thus, in the sale of the canoe, the motive to sell may not be so strong as the motive to acquire the rifle, but may rise to the point of selling when the moccasins are offered to boot. In a money-

using society, people spend their money in direct proportion to their desire for things, and there it is perfectly right to say that a man thinks twice as highly of a thing for which he pays twice as much money.

Further discussion of the circumstances that surround fluctuating and short-time prices will not be gone into at present. Enough has been said to enable the student to discuss the question as to whether both parties gain by an exchange, as to their usefulness to each other, and other questions suggested under the topics. The discussion of subsequent chapters will necessarily throw light upon the preceding ones.

TOPIC I

Trading a Rifle for a Canoe

(*a*) Imagine an environment.

(*b*) Is the title of this topic a social act?

(*c*) Does it establish a rule or "uniformity"?

(*d*) What is the object of each party?

(*e*) Is there a public point of view in this case?

(*f*) What motives would cause one party to demand and the other to yield something "to boot," say a pair of moccasins?

(*g*) Is their point of view material (i. e., physical) or immaterial (psychic)?

(*h*) Do they use a measure or measures of any kind, like a yard stick in measuring a quantity of cloth?

(*i*) Is either party better off after the trade? Are both better off? Are they better producers? Better consumers, i. e., obtaining greater satisfaction?

(*j*) Would their gain be more probable if they were dealing in a regular market for rifles and canoes?

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TOPIC II

The Price of Cobs on a Market Day

(*a*) What is a "market price"?

(*b*) Its relation to the buyers and sellers as classes? Do they all buy and sell at the same price? Do any? How many? How many sales on the Board of Trade are at the prices quoted in the papers?

(*c*) Is the supply all the cobs that could be bought up, or that are actually on hand, or that are actually produced, or something else?

(*d*) Is the demand all that people could buy, or something else? How many people?

(*e*) Environment. Distinguish from essay I: number of persons; time occupied by the transaction; supply and demand.

(*f*) What are the constant factors in your reasoning, and what the variables? Do the constants and variables change places at different stages?

(*g*) Is "price" more "regular," less "speculative," less dependent upon individual advantage or superiority than in paper I?

(*h*) Do individuals derive any advantage from living together, in this matter of price? How as to their own production? Their own calculations?

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TOPIC III

THE PRICE OF FISH ON A MARKET DAY AND IN THE LONG RUN

(*a*) How do fish differ from cobs in the time taken for their production, in perishability, and in their other characteristics, and hence affect supply? Environment.

(*b*) What is the effect of these peculiarities on demand and on price?

(*c*) Are the peculiarities of production so prominent when we consider fishing as an *established* industry? Environment.

(*d*) Can you draw a sharp line, in the nature of the calculations, foresight, etc., involved, between (*a*) (*b*), on the one hand, and (*c*), on the other? Note the growing importance in these topics of the element of Time in production.

(*e*) What differences in social development and civilization does this topic presuppose from topic II? Is the market price

more or less a uniformity for all society? Can we, in any sense, look on society as a unit?

(*f*) Distinguish the constants and variables of the argument.

(*g*) What relation has your discussion to individuals and to society,—as to welfare, as to present people, as to future people?

(*h*) What advantage does the *individual* draw from a market?

CHAPTER II

STEADY PRICES

The splitting of the question of prices into the two titles of "steady" and "fluctuating" is in order to allow the application of the test of Time. The words "steady" and "fluctuating" do not of course indicate principles; they are simply characteristic of the general conditions in which principles may be realized. They indicate results, the causes of which must be inquired into, but not the causes themselves. We have seen that a primitive economy offers conditions under which we are constrained to look upon the parties to a bargain as confronted with a sudden situation; not that the two frontiersmen had not, for some time before, foreseen the mere possibility of making an exchange, but that exchanges with them were a matter of such rare occurrence that they were not reduced to a plan and system, and were not involved in a complexity of preparation. In fact it is the simplicity of the preparation upon which we must lay stress, and this is so true that we may practically *leave the preparation out of account* as an element too insignificant to play a part in our inquiry. The principle here applies which the lawyers embody in the phrase *de minimis non curat lex*, and which the mathematicians would comprehend under the statement

that in a static problem infinitesimals may be disregarded.

The primitive environment, therefore, enabled us to conclude that even under the very simplest conditions the economic problem is essentially a subjective one, and that demand and supply are but two elements into which the thought may be analyzed which accompanies an exchange. Our simple supposition, moreover, enabled us to perceive the relation of economic life with the non-economic, which we found to be so close that it seemed hardly useful to separate them. In fact, there would be no advantage in separating economic from other social sciences, were it not that as our supposition becomes more complicated the separation becomes a necessity for purposes of analysis.

Since any set of circumstances is taken to be sudden, it follows that one set of circumstances offers little experience for the regulation of another, and, what amounts to the same thing, offers little possibility of drawing inferences from one set that will be applicable in another. Hence we may look for the most extraordinary fluctuations of prices in the primitive economy, and hence also it is that, as a matter of fact, history discloses to us only that, before the industrial revolution agricultural products varied five or even ten-fold in price on successive years, but that in one and the same season the variation in price between two districts that would now be regarded as neighboring was then so great as to amount to a glut in the one and to a famine in the other.

The enormous widening of modern markets has been accompanied by no corresponding increase in price fluctuations, but rather with a diminution. The advent of a world-wide supply and demand has been accompanied by a corresponding corrective of adjustment in price; and aberrations of price have come to cause equally nice adjustments of supply and demand. It behooves us, therefore, to inquire what new principles of action and what new conditions of man's activity have arisen to work this revolution. An analysis which shall throw light upon this question must probe deep into the nature of social man; for we note, as the most prominent feature in the new state of affairs, the social nature developed within man.

The cosmic character of the problem may be briefly and appropriately stated at the outset. Increasing steadiness of price, if it is to have an *unbounded* development, can result in nothing but absolute fixity of price. We may then for a moment look upon all prices as having reached a perfect uniformity. The rate of exchange of all products in the community remains absolutely the same for all time. Now this supposition is in no other sense untrue than the mathematician's supposition of a straight line, and does not mark out economics as a science less exact than mathematics.

Our task is to form a realistic conception of the state of affairs just contemplated. Can we regard society as progressing, or as merely living, or as al-

ready dead? As to progress, we may conclude that it is removed, at least from the economic sphere, by the stoppage of all fluctuation in prices. As to life or death, the question wholly depends upon the nature of the equilibrium of prices established. If the equilibrium be one imposed arbitrarily by some force coming from without society, then the very nature of the expression implies death, for no thing can live except through its internal activity in natural relation with external forces. If, on the other hand, the equilibrium be reached through internal development up to such a point that all contending elements may be supposed to have attained to a state of harmony never to be disturbed again, then we have the supposition of a golden age, where expectations ever wake afresh to sure realization.

If there were in nature such a thing as a complete realization of an idea (or, in mathematical language, the possible attainment of a limit), even then the attainment of the living equilibrium could only occur through internal development.

The mistake of untrained and hasty reasoning upon social subjects is generally that it strikes the other and inorganic note of dogmatism: it impatiently attempts to cut the Gordian knot of progress, and by the supposition of an external *deus ex machina* endeavors to introduce the final stage at a stroke. As already stated, logic is logic, whether met upon the street corner or before the court *in banc;* it is the primitive weapon of all man's achievements. The failure of popular logic, therefore, is not in its mode, but

in its breadth. In the absence of patient enumeration of conditions and of untiring analyses of them, it seeks a short cut by which it attempts to realize something which it has not been able to conceive.

Doubtless the distinction noted between successful and unsuccessful thought is one to which these papers will from time to time recur.

In this connection it is only necessary further to note that the supposition of prices that have reached a perfect equilibrium was made for the sake of argument. It was a sop thrown to Cerberus in order to enable us, by going a part of the way with a great popular error, thereby to refute the whole. We can not look upon prices as ever possibly reaching a fixity. Not only is the environment of man a changing one, —the tides, the phases of the moon, the alternation of the seasons, earthquakes, volcanoes, inundations, storms, the very uncertainty of the spots on the sun— but his own being lives and thrives in flux and change. The subject of steady prices, therefore, leads us back by a few short steps into the profoundest problems of ontology.

The understanding of the more complicated civilization may fitly be approached through the fundamental distinction between Space and Time. Since the element of Time was noticeably absent in primitive civilization, that element was used as the means of distinguishing the two stages. The element of Time thus stepping into the foreground in the later stage, could hardly fail to bring with it its constant companion, Space. If, therefore, we seek to characterize the later

period, in thought drawn from the most fundamental conceptions of the universe, we can not avoid beginning with these two elements; and we shall find that in their manifestations industrial life is completely embraced.

For a moment, therefore, we may allow ourselves to take Space, affected by the advent of Time, as a test. Division of labor may be conveniently viewed first as a function of Space. Industry, like territory, is divided into myriad fields; and the truth is literal, for, with the early appearance of agriculture, we may suppose different products to have been cultivated in different fields, and thus a difference in industry to have been necessitated from the very circumstances of the partitioned space. But no sooner do the phenomena of Space multiply, than they create out of themselves, as it were, the phenomena of Time. Variety of production can be of advantage to no one without exchange; otherwise each man in his isolated economy remains as devoid of variety of enjoyment as though all produced the same crop. But such is the nature of things that variety of enjoyments can only be assured by that waiting which is necessary in order to effect exchanges. Division of labor, therefore, can not become effectual for man's benefit unless it involve a necessary lapse of Time. Thus Waiting, with all the countless intellectual and moral qualities which it implies, stands forth as the herald of the later dispensation.

Having indicated some of the necessary universal principles without which the more special reasoning

could not proceed, let us now turn to the latter. In a primitive economy the exchange took place at the instant of equilibrium between the desire to sell the canoe and the desire to purchase the rifle. We noted that this equilibrium was purely mental. It could not be a relation between such disparate things as a canoe, on the one hand, and the desire for the rifle on the other. Nor can it be an *equality* of mental forces, for the two men have entirely separate standards of action and valuation: equilibrium and equality are very different things. The exchanges in a complex civilization must similarly take place at a point of equilibrium of mental forces. In the primitive case the control of those forces passed beyond the economic sphere; their final action alone could be recorded. In the complex civilization, the economic sphere is much larger and economic forces can be traced back much further, before they emerge and are lost in the general environment; for Time has now entered the economic sphere, and we can observe its steadying hand in the maintenance of the equilibrium of price. An originally momentary equilibrium, lacking all stability, now becomes stable, and, although constantly disturbed, tends with pertinacity to return to a normal position.

Infinitely complicated as is the process in the details of industrial life, its general traits stand out with sufficient boldness. The circumstances of Space for a given business, like the manufacture of cotton thread, are fairly determinate. In production, the following are some of them: the manufactory is often

most conveniently located at a great distance from the field where the cotton is grown. It may also be located at a great distance from the coal mines. Many products of iron are used, ranging from the Bessemer steel of the rail to the finest ingot steel of some parts of the tools and machinery. Bricks, wood, food, and clothing for the workmen—all must be provided and wrought into proper forms. The technical details of this provision are matters for countless trades and for the industrial sciences which pertain to them. What concerns us is the broad fact that these details are consciously present in the mind of the captain of industry who manages the business. His mind grasps them in their largest aspects.

Now all these circumstances of Space (and I here include most specifically those arrangements of matter in Space which constitute the great inventions and characterized the industrial revolution—such as the invention of the steam engine and of the flying shuttle) are *representatively* or *re-representatively* present in the mind of the captain of industry, and cause him to *calculate*. But calculations always relate to the past and to the future. In his mind, the prominent facts are not those arrangements of matter in space called a steam engine or a flying shuttle, but *how long,* through the action of engines and shuttles, it will take the yarn to become cloth; how much cloth others will be enabled to demand of him as a result of the arrangements in Space (i. e., inventions) obtaining in *their* industries; and consequently

what discounts he is justified in requesting at the bank—their amount and their time to run.

It is not necessary for the purpose of the present argument to formulate a separate law which may afford a measure of the correspondence of Time-with-Space-adjustments, although that has been attempted with considerable success by von Boehm-Bawerk. All that we need to do is to show the existence of *some* correspondence between Space and Time in the methods of production. Indeed, it is often true that new space arrangements actually shorten the time of production; and while the general contrary contention, i. e., that inventions in the long run lengthen the time, is maintained by the author alluded to, we may here be satisfied with the general proof that those arrangements that invite interchange involve Waiting.

We are now but a short step from the full explanation of steady prices. The brief analysis of complex production needs but little supplement. One would naturally expect that the difference between sudden environments and those which are attended with mature, recurrent calculations would be precisely that between fluctuating and steady prices. Stripped of all minutiae, the simple fact is that the captain of industry averages out the experience of the normal period of production: he knows that on the average the price of his materials and labor and wear-and-tear will be so-and-so. And again, that, on the average, a market will be found about enough higher than those expenses to pay him for his pains. This average holds

true, notwithstanding the fact that he is constantly contending with the producers of raw material on the one hand, and with the purchasers of the final product on the other, day by day, and in many places, for an advantage in price as buyer or seller.

In fact, the lesson here sought to be most strenuously inculcated is *not* that the normal calculations of the captain are made *in spite* of the daily struggle, but that those calculations are the *healthy* and *normal result* of the daily struggle. It is life that produces rules and not rules that produce life. Every price is a symptom of life activity, and the absurdity of a *legal* scale of prices as a matter of principle is glaringly manifest to one once imbued with the conviction that social life is as highly organic as is vegetable life. It is not denied that practical exceptions to the application of this principle obtain. Instance the tariff of prices established by a military governor in a conquered province, as by General Wood at Santiago de Cuba. Such exceptions will be further mentioned when we come to the discussion of chapter V., Speculation and Monopoly.

In principle, therefore, the steadying effect of all time-calculations is manifest. The captain of industry naturally tends to demand the normal price, or what on the average he thinks will pay. Of course, many men in his place would charge the highest price they could get for the moment. But such men are "back numbers." They belong to the old era of fluctuating prices. They can not maintain themselves in developed industry, where it is so easy to "spoil the

market" by overcharging. The modern captain of industry looks ahead a long way. It may be longer or shorter, but still it is far enough to constitute a normal period and a normal price. If he charges more, he will lose his customers; if he charges less, he will lose his profits; and while the daily contests of the market will lead him above and below the line, he is fully conscious that he can not hold to an excessive price and can not afford a very low one. An analogous situation in a very small way is afforded by the case of a merchant tailor who makes an arrangement with one of his customers, whereby he offers to furnish the latter with trousers at ten dollars apiece, year in and out, the customer to be allowed to select any goods in the stock of the tailor, and the tailor to stand the loss if the goods selected happen to be so expensive as to eat up his profits. In the long run, the tailor calculates to have sufficiently the best of the bargain to afford him customary profits.

It has been stated above that agricultural prices have grown much steadier within the last two centuries; but it is evident that agricultural industry is not capable of the steadiness of price of which some others are capable, because it is so directly influenced by the seasons. The equalization of agricultural prices is accomplished much more through transportation and speculation than through calculations made by farmers, who are the manufacturers of agricultural products. It was, therefore, better that our illustration of steady prices should be taken from an industry in which the raw material alone and not the

final product is agricultural. In both cases, however, the tendency is for prices to become steadier. *Somebody* makes the calculations which anticipate a normal period of production; for we must observe that these calculations are divisible into two classes, those which relate to the supply and those which relate to the demand, and hence to those persons who sell and those who buy. If, as in the case of agricultural products at the end of the harvest season, the supply is a tolerably ascertainable material quantity, then the speculators set busily about the work of adjusting the price of that supply to an anticipated demand. If, on the other hand, the demand be for, say, a certain class of cotton goods, consumed with little variation in quantity by a static people like that of Hindostan, then the adjustment will lie on the side of the materials, labor, rent, and other expenses on the part of the captain of industry.

TOPIC IV

The Price of Spool Thread by the Gross

(*a*) The object of our inquiry is to ascertain the *forces* which *result* in the price. (In physics, the resultant of the forces.)

(*b*) There must be an equilibrium—or there would not be a price.

(*c*) How do the conditions of supply in this manufacturing business differ from those in topic III? Environment. Element of Time; nature of the manufacturing business. Element of foresight and of calculation. Analyze completely.

(*d*) Are there more distinct forces in this case? Which forces take a more prominent part, supply or demand, at least relatively to the previous topics?

(*e*) Are the new forces *additional* to those in the other cases or substitutes?

(*f*) Are the calculations of one manufacturer the same as those of all? If not, how can we obtain in this case also a *market* price, *i*, *e*., a social result. How do calculations of all together differ from those of each? How is society benefited by their differing? A difficult problem. Partly, the answer may be found in the truth that if the individuals did not differ, no uniformity could be evolved! Explain how this differing is called "competition." Different methods of manufacture, sources of supply, transport, etc.

(*g*) What forces do you especially isolate for study in this case? The machines that make the thread, or the machines that make the machines?

(*h*) What differences do you especially study? Market prices or rates of profit on capital—on machines that make machines, etc.?

(*i*) What forces studied in this paper are outside of man, and what forces inside him? Are the latter natural?

(*j*) What advantage does the *individual* draw from the circumstances contemplated in this topic above what he can obtain in topics I, II, III? low prices of things not previously obtainable, or only by the rich; decrease of effort; still more uniform prices; others benefit him as much as he benefits others, etc.

(*k*) Show how a *social life* is attained through a market price.

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TOPIC V

The Price of an Acre of Arable Land

(*a*) Does the price come from its immediate use or from all its future uses? Distinguish price from rent. Does the price cause the rent, or does rent cause the price? How can you calculate the price of a thing that is durable and will always be useful?

(*b*) Enumerate all the differences between the supply of land and that of spool thread. Abundance, possibility of increasing, method of increasing.

(*c*) Is land manufactured or discovered? Do railroads bring land to its purchasers? Differences in demand.

(*d*) Is there in the realm of industry a sharp line of distinction between the calculations that settle the value of thread and those of land, or could you mention a large number of intermediate cases?

(*e*) What calculations does the owner of the land make? (1) before purchasing, (2) after purchasing? In which of the last two cases is he distinguished from the maker of the thread? i. e. can he calculate as freely after purchasing as before?

(*f*) Price of land in new and old countries.

(*g*) Effect of improvements in cultivation, in drainage, in machines.

(*h*) Is land the source of all wealth? Distinguish carefully between a *physical foundation* for further economic operations—food, clothing, shelter, pianos, paintings, etc.—and the utilities

that reside in those products, i. e., is a thing more useful because more material?

(*i*) What has "Time" to do with our calculations about land?

(*j*) Distinguish *land* from *man* in every general way.

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TOPIC VI

Is Wheat Higher Compared With Spool Thread in New York or Dakota? How Will The Price of Wheat be in Dakota When it is as Populous as New York?

(*a*) What would you say makes wheat high or low? thread? Is it because more labor is expended on the one than on the other? On which? How do you "get a start" in your calculations? Is there such a thing as wheat being absolutely high, or only compared with former prices, or with thread?

(*b*) Explain fully what is meant by saying that wheat is *comparatively* higher in one place than in another.

(*c*) Study and explain the "land" or objective elements of comparison. Price of land; productivity of land; distance from market; cost of transportation.

(*d*) State and explain the "man" or subjective elements of comparison. Density of population; inventiveness in agriculture; inventiveness in spinning; standard of living affecting demand for produce or manufacture respectively.

(*e*) How high can wheat or thread go? How low?

(*f*) Is there a necessary connection between the price of wheat and that of thread?

CHAPTER III

PROFITS

We have seen that, in the primitive economy, the rate at which articles of wealth are exchanged against each other is determined at a point of equilibrium where the desires of both parties to the exchange are mutually expended in influencing each other and themselves. We have also seen that these desires correspond to conceptions or ideals of advantage which belong to the individuality of the exchangers, and that this, in turn, depends upon the state of civilization and upon the accidents of birth. Each party being competent to thrive within his own environment, and the exchange having been freely made as the result of his own sufficient calculations, it follows that each must find himself in a better position after the exchange than he was in before it. There is, perhaps, no way of discovering which has gained more, for there is no means of measuring the advantage of one as compared with that of the other. The shrewder man has undoubtedly gained more than the less shrewd one; but it does not follow that the less shrewd has lost.

In this primitive state, the questions of exchange and of gain are found united in extreme simplicity. The rate of exchange is the result of an equilibrium

of conceptions of advantage; and the exchange once made establishes the parties to it as the possessors of the advantages agreed upon. Thus the broad economic categories of *exchange* and of *distribution* are practically found in an undifferentiated stage of development. No money is as yet in use, and only general observation can determine whether the parties are making good use of their little market. If they are noticed to improve in their provision for life, to become gradually better clothed, better housed, and better fed, it may fairly be concluded that their general way of doing things is a good one, and that their habit of exchanging is no exception to their general thriftiness.

But where are the wages and profits of this primitive economy? Every fact has already been brought within our anaylsis. The gains of exchange and of production have as yet raised no question of wages or profits. It will be said that society has not yet divided itself into capitalists and laborers. Are, then, the primitive people neither capitalists nor laborers? Can they receive neither profits nor wages? One thing is evident, and this is the one thing to which attention is here directed: the *returns* or *income* from the primitive economy *are the exchange-values.* If, then, in a more developed economy, profits and wages are something different from exchange-values, we shall be interested in discovering in what that difference consists. One would naturally expect it to consist in some peculiar development of exchange-value so prominent as to deserve particular study, and to

assume a character which would correspond to the common and quasi-popular topic of "distribution."

It is here proper to advert to a confusion which exists in economic theory with reference to the meaning of the terms profits and wages, and which the method of treatment here proposed bids fair to clear up. There is evidently no reason for applying the term "profits" rather than the term "wages" to the exchange-values of the primitive economy; and yet, since these, together with rent, constitute the incomes of advanced society, we are justified in applying either term to the primitive increment. A part of exchange-value simply replaces the *exchanged* value, while a part is gain; in other words, the goods we receive contain a greater value for us than those we part with. If we use the term "profits" for this primitive exchange-income, does it represent the whole income, or the surplus, or the replacement? The same question may be asked as to "wages." The custom of language inclines us to identify profits with surplus, and wages with replacement. This custom is partly the result of temporary conditions and partly the result of legal usage. The legal usage itself is probably dependent upon the economic conditions. It is customary, under legal sanction, for some parties to keep possession of the economic goods devoted to processes of production until a larger or smaller part of them are paid out to the others as their shares. The surplus becomes the property of the party in possession.

The share of the capitalist is not necessarily an economic surplus, but is very commonly mistaken for

such surplus. That it is not necessarily a social surplus follows clearly from the circumstance that, in the long run, a division will take place between all parties, even though there be no excess above the replaced values or even a loss. The capitalists who have undertaken the responsibilities of employment will finally succeed in reducing wages so that laborers will bear a portion of the loss, or they will retire from business.

Correspondingly, it is customary to identify wages with the replacing values, because of the same crude assumption, that, since employers take the surplus, the laborers can not take it. The surplus, however, contemplated in popular phraseology, is entirely different from the surplus contemplated by economics. In a short period it is true that the legal arrangements of employer and employed are determined upon a contract basis, and that the terms of the contract give the chances of gain during the existence of the contract to the employer. It may, however, happen that the rate of wages agreed upon was such as to preclude all possibility of gain on the part of the employer, or to foredoom him to financial ruin; and in case he makes, under the contract, unusual profits, it is pretty certain that, upon the renewal of the contract, the laborers will insist upon a larger share. Of course, they can only obtain an advance in case general trade conditions are favorable.

It may be true that, under the special conditions existing at a particular epoch, the lion's share of the product may find its way into the pocket of one of the

parties to the disadvantage of the other. Brains, talent, ability (we do not here speak of over-reaching, cunning, and unscrupulousness) habitually command a high reward. They have been commonly associated with that share of exchange-values called profits, and hence there is a certain justification outside of, and back of, legal sanctions for the association of profits with surplus. This association, however, is merely a habit of mind, induced by observations extending over certain periods or localities. When brains become more common than muscle, when responsibility and trustworthiness become more common than muscle, or are found more commonly united with muscle than with brains, then, unquestionably, the lion's share of the surplus will go into the pockets of the men of muscle. Of course this reversal of history is hardly probable; for the advance of society in mental and moral development tends to supersede the demand for muscle, and thus continually to keep it at a disadvantage. As society grows more psychic, monopoly of muscle will be of little advantage, since society will have less and less use for it.

Looking, however, at the question of wages and profits in its *broadest aspect,* there is no absolute necessity for identifying either branch of income with either the gains or losses of society. If we seek a broad and universal framework for our conceptions of class relations, we must exclude from it any preconceptions as to which party is to obtain the advantage in the bargain; and we are forced to this form of thought by the undeniable fact that laborers

do, as a matter of fact, receive some share of the surplus. As production increases, wages rise.

It is, therefore, an unwarranted usage which identifies profit with surplus, and wages with replacement. Such usage would compel us to say either that in the primitive economy there were no profits or wages, or that one part of the exchange value was profits and another part wages. The former alternative will not hold, for we can not say that the hunter of our illustration received neither profits nor wages. That would be a strange and artificial use of language. Nor will the latter alternative hold, for then we must say that his gains are all profits or all wages—an impossible identification. The illustration of the primitive economy, therefore, shows us that the broadest framework, that which will leave us the most free to make changes fitted to all circumstances of Time and Space, must exclude the temporal prejudices that cloud our vision with respect to the relative advantages of profits and wages.

Let us now pass to those characteristics which distinguish profits from wages. Such distinction can only arise, as we have seen, in the higher civilization; and this civilization we have characterized by the idea of Time. We have therefore to inquire what are the workings of Time upon the exchange value which constitutes the primitive income. The whole matter will be cleared up by reference to a new generalization: development does not wholly abolish the old, it rather adds the new; it is a process of addition rather than one of transformation. A vulgar simile teaches that

a bucket full of shot has still room for a large quantity of water. Similarly, a highly developed civilization contains at least as many savages as could have existed alone before the civilization was developed. Thus we perceive that it is not unnatural for the differentiation of exchange values to fall into different classifications in the measure in which corresponding industrial classes participate in the movement of progress. These classes, of course, are as numerous as we choose to make them by carrying closer and closer our microscope. The division of the exchange values between only *two* classes, capitalists and laborers, is therefore a rude device adopted for the purpose of bringing forward for discussion certain broad questions of differences in participation in the social fund.

It has been shown that the chief industrial elements in progress are certain rearrangements in Space known as the "great inventions," which characterized the industrial revolution of the eighteenth century and which are multiplying with an increasing rapidity to which we now pay little attention, unfortunately; for our social and political weakness lies chiefly in our ignorance of our own progress. The inventions of the last twenty-five years have perhaps added more than those of all preceding time to the exchange values that are subjected to distribution between the static and progressive classes. These arrangements of Space comprise not only mechanical inventions but also chemical discoveries. The separation of chemical elements is theoretically as

explainable on principles of Space as is the separation of physical elements into levers and cogs.

Closely allied with that patience which inspires the brain of the inventor, or rearranger of matter in Space, are the patience and brains which appreciate the inventor's purposes and wait for the fruition of his plans. The progressive classes, then, are those who think, and those who watch and wait for better things. Doubtless many believe that they are waiting to a purpose who are merely amusing themselves with idle dreams. Such are surely swept into the ranks of the non-progressive by the inexorable laws of survival. Many think well and wait poorly, or lack the proper social nature to combine their thought with the waiting of others. Their one-sided thought relegates them to the large contingent of those who are discontented because they are filled with misconceptions. Many violate the laws of social ideality and are thus enabled to obtain an amount of exchange values which their aims and character neither justify nor dignify; their exchange values are apples of Sodom to *them,* but in many cases in the end help men, who are more honest.

All parties to discussion about the industrial classes agree in a general tendency to set over manual labor, upon the one hand, against the complex that has just been alluded to of those who wait, who risk, who abstain, who calculate, who superintend, and who manage, on the other. The chief controversies are as to the merits of these classes upon some ideal and

generally imaginary basis. The controversies are commonly accompanied by extremely personal motives, and by tendencies to identify the classes either with their merits and services, or with their vices, exclusively.

TOPIC VII

On What Does the Income of a Manufacturer of Thread Depend? (of a Wholesaler? of a Retailer?)

(*a*) What part is played by the value-adjustments discussed in topic IV? that is, does the fact that he has to make calculations about the machines that make machines in order to fix his prices involve an element of calculation on his profits, and in what way? Imagine yourself to be such a manufacturer.

(*b*) What influence is exerted upon him by his observation of the profits of other manufacturers? Are the expenses of all the manufacturers the same? Then are profits equal or unequal? If profits are equal, what other diversity exists between different businesses? (Different processes for doing the same thing.)

(*c*) So far as the question is general, *i. e.*, common to all manufacturers, what regulates profits? (Productiveness of industry?)

(*d*) But what regulates choice of the branch of production? Wages in that branch? Cost of materials? Willingness of manufacturers to accept little or much? Laborers? The general skill required under modern business conditions, *i. e.*, the state of the arts and industries? The rate of interest? The desire to accumulate fortunes?

(*e*) How much would laborers be willing to pay their employers? (Evidently the price of the loss of doing without them.)

(*f*) Can cost of the material be eliminated from the question?

(*g*) How strong is the influence of the mere ideals of living entertained by employers and laborers in causing them to be contented with low (or high) profits?

(*h*) What different environment was offered by the state of the arts one hundred years ago? (Comparative skill, steadiness, sobriety of employers and men; supply of the same.)

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Macvane: Political Economy, ch. XVIII.
Andrews: Institutes of Economics, secs. 121-123.

TOPIC VIII.

On What Does the Income of a Farmer Who Hires His Land Depend?

(*a*) On his rent? *i. e.*, if the rent were lower his income at the time would surely be greater. But how about this supposition? Could rent be lowered? Does not competition fix rents? (See topic IV.)

(*b*) Is it not to the interest of society to preserve rent? Is it to the interest of society to encourage differences among farmers' profits?

(*c*) If rent be subtracted from the farmer's total production on the hired farm, then what affects his income? What difference is there between him and the manufacturer? Difference in environment; nature of materials. Is land one of the raw materials? How does land differ from cotton? How about the relative importance of land and cotton in farming and spinning respectively? The amount of machinery and labor to be replaced in the places of the farm produce and thread respectively?

(*d*) Will the farmer obtain higher profits than the manufacturer as population increases and price of produce rises?

(*e*) Will the fact that he will be induced by the high prices to cultivate more land lower his profits?

(*f*) Why can not prices rise fast enough to counterbalance the poorer land? (Because the higher the price, the higher the wages as well as the greater the quantity of labor.)

(*g*) Does this put the farmer at a permanent disadvantage with respect to the manufacturer?

(*h*) Note the transitory and permanent influences in this topic.

TOPIC IX

The Price a Tenant Farmer Has to Pay as Rent for the Farm

(*a*) Do all farms yield the same produce to the same labor and skill, at the same price of produce? How can farmers on 25 bu. land compete with those on 30 bu. land?

(*b*) Will the tenant pay so much rent as to leave him less than he could earn in the long run at another business?

(*c*) Will others stand by and let a man offer less than they can afford to pay, without bidding themselves? (See topic VIII (a)) Do tenants as a class, or landlords, fix the rent on each piece of land?

(*d*) Which class makes the calculations as to whether it pays to cultivate the land more intensively? (The landlord is supposed to make no improvements.)

(*e*) Does the landlord take a residue?

(*f*) When a man buys land, does he not *calculate* whether the rent will pay *him?* Do such calculations affect the question whether the rent is a residue *to society as a whole?*

(*g*) Is rise of rent a gain or a loss to society?

(*h*) Is rise of rent a loss to laborers and farmers?

(*i*) Does general rise of rents indicate that the country is growing richer or poorer?

(*j*) Who will be injured by a tax on rent? Can the landlord make the tenant pay it? How about tenants as a class?

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Mill: bk. II, ch. VI (as to competition, sec. 2); bk. III, ch. III.

Davenport: ch. VII; Elements, ch. VII.

Hadley: secs. 297, 318-326.

Walker: part IV, ch. II, secs. 509-520 (as to amounts of land and labor "entering into" products).

Ricardo: Pol. Econ., ch. VI, On Profits.

Andrews: secs. 103-199.

See also references under topic XXIV.

CHAPTER IV

WAGES

We have seen that the exigencies of complicated production have brought it about that different parties vie with each other for shares of the exchanged values. In other words, in cases of cooperation of many producers, where each person does not make or possess separately the article which is sold, it becomes a complicated question to determine what is his share in the sale.

In order to settle this question with simplicity and deliberateness, it has been usual to assume the existence of two classes of industrial persons: (1) those who are more identified with the forward movement of the times and with producing the changes that are continually taking place in industry; and (2) those who are contented to follow antiquated methods as nearly as the newly created conditions will permit. It is impossible to discuss the income of one of these classes separately from that of the other. They must vary inversely with respect to each other, since they both contend for a common fund. What is true of a single business, in this respect, is also true of industrial society taken as a whole. Since, moreover, the income of each industry is what it receives in exchange, and since what all industries receive is nothing other than the total of what all produce and give

in exchange, it follows that the total income is equal to the total production. However, we can draw no inference in any industry from the physical amount produced as to what will be the amount brought in by exchange, and we are driven to seek standards which are not physical. The process of value-adjustment is precisely analogous to the process of clearing bank checks in a clearing-house: the amount of the debits is always precisely equal to that of the credits, so that the total amount after liquidation is neither greater nor less than that which existed when clearing began; but the different banks find their relative balances changed.

This total income of society may theoretically be so divided as to increase the balance to the credit of either the progressive or the non-progressive class. Our framework is large enough to allow of either alternative, and if one class is favored, that must be the result of special causes. Into these it is now our duty to inquire and by a gradual process to narrow the theoretical limitations on the height of wages.

The very fact that the non-progressive classes do not foresee, calculate, wait, and accumulate, is sufficient to show that, notwithstanding that their participation in production is actual and, if you will, meritorious, nevertheless their share of social income is somewhat passive. It is not so passive as is rent, for rent does not theoretically correspond to any effort of production at all; but it is more passive than profit, for it corresponds to animal rather than to psychic activities.

Hence it was that it became customary to look upon laborers as the recipients of a fund or residual paid to them after employers had reserved their profits, and, according to some, after rents also had been deducted. It is true that Mill said that profit was what was left over after wages had been paid; but he also said that investment took place after capitalists had reserved what they chose for their own use. We thus arrive at the very simple conception of a *fortuitous* mass of laborers who are the recipients of a *calculated* fund. There is in this conception nothing determined; everything is submitted to the arbitrary volition of capitalists. Let us draw the lines closer.

The capitalist, it is said, will be led by his desire for accumulation to invest all that his standard of living does not cause him to reserve for himself, and thus to employ laborers. The reality of this law is confirmed by appeal to experience, the narrowness of profits in the business world showing that it is no arbitrary deduction that capitalists make from the product of labor and capital in determining the residue that shall go to labor.

Leaving for a moment the study of the fund, we may pause to consider whether the non-progressive classes are destitute of *all* process of calculation, whereby, from their side, they may affect the share of each worker. If a laboring man make an invention which increases the social production, he is apt thereby to cease to be a laboring man and to come to be associated with the profit-taking classes. Under the calculations of laborers as such we can not include

those nice inquiries into the world-supplies of grain; those nice adjustments of interest on securities, of arbitration, of exchange; those prolonged and expensive inquiries into industrial chemistry; those refined adjustments of the exactly proper proportions of materials, of machinery, of processes, of foremen, of skilled and unskilled labors, which characterize the higher mental consciousness of the progressive classes.

The laborers are, however, not without conscious or subconscious calculations. They must perceive that if they are too numerous they will compete against themselves, and hence they will naturally move from place to place in search of a locality where there is less competition of laborers, and more competition of employers. They must perceive that they and their children will find competition of employers for labor more active in the skilled employments, which require education. They must perceive that ability to change one's trade is a most potent means of escaping the competition of other laborers. General convictions along these lines can not fail to permeate the mass of wage-workers, and to influence their conduct, especially in the multiplication of their numbers and in the education of their children. Their sentiments are, however, only too often directed towards affecting the conduct of others rather than towards modifying their own conduct. While perfect organization of labor in trade unions is highly desirable for the sake of the exact adjustment and smooth working of our industrial economy, laborers make a mistake if they think that, apart from special cases, the whole

amount "reserved" by employers as wages for their own services would greatly raise the average if added to the income of laborers.

The existence of different trades complicates the conception of competition among laborers. In very many cases laborers can not move from one trade to another. Capital, however, may be roughly assumed to have this mobility. Hence, within such trades, wages must depend entirely upon the available capital; and as this will fluctuate with the activity of the trade, wages will tend to fluctuate correspondingly without any counteracting competition from new laborers moving into the group, or non-competition because of old laborers moving out of it. The development of capitalistic industry, however, is tending to decrease the rigor of the specialization of labor, while the spread of education tends to give the laborer more flexibility and enterprise. The demand for labor is becoming more and more a demand for trustworthiness. Employers ask, "Is this man one whom I can trust to tend a delicate and valuable machine?" no matter what the machine makes. Thus there is coming to be considerable reality in the conception of a general fund of capital offered to a general class of laborers.

The truth of the conception lies, however, rather in the generality of the relation between capital and laborers than in the definiteness of the fund. It will be shown later (chapter VII) that the essence of capital consists in the intention of the capitalist to devote his wealth to production, and hence to devote a part

of it, at least, to the employment of laborers. This intention suffices to put wages at the command of laborers. How much wages depends, of course, upon the state of the arts and upon the zeal and efficiency of the laborers themselves. While the laborers are non-progressive, the fund itself is increased by the progressive activities that control it. We saw that the income of all businesses added together is equal to the total production of all businesses. In the same way, it is true that the income of all classes when added together is equal to the production of all classes; and this again is equal to the production of all businesses. Here again the analogy of the clearing-house is complete; what the classes take away after liquidation is equal to what they brought before, only it is differently distributed. Hence those are wrong who imagine that the fund disposable in payment of particular wages is composed of the material or tangible additions which individual laborers make to production. On the contrary, if there be, at a given moment, a great demand for labor, there is no reason why the laborers should not receive a part of the addition to the products of industry due to the skill of invention and management, and to the strength of character that waits. The non-progressive may partake of the fruits of Time. Hence it is generally wrong to say that capital and labor are enemies. In a North River tow, the tug-boat reaches the Erie Basin a long way ahead of the canal boats and barges that it has assisted on their voyage; but the latter would have made poor progress if their owners had been content to let

them float down the river with wind and tide. The fund, therefore, devoted to the payment of wages is no stationary amount, but is continually augmented by progress, and forms a part of the general fund which is better thought of as the income of society.

It is true that if we do not take any length of time into consideration, the conception of a fund does become more static. A rise in the money wages of laborers will cause a greater demand for laborers' commodities; but as those commodities can not be supposed to be suddenly increased in quantity, it follows that their price will rise, and that the real income of the laborers will not be increased. If, however, time intervenes, the higher money wages will call forth a greater production of laborers' commodities, their price will fall, and laborers' real wages will rise correspondingly. The element of time, therefore, gives opportunity for full play of the calculations of employers. In the case supposed, employers having more need for laborers were willing to pay them more highly, and the lapse of a short time was necessary to realize their expectations.

The more carefully the subject is considered, the more clearly it will be seen that, in spite of all the difficulties which may exist in the way of a clear perception of the laws which govern wages, it is certainly true that employers have no arbitrary discretion in the matter of paying wages. It is true the employers possess the legal title and management of the means of payment and the machinery and buildings; and that the calculations are made and the bookkeeping is

cared for in their offices. It is but natural that the law should have confided the responsibility for the care and management of these weighty matters to the hands of the calculating and responsible classes in which, in point of fact, it found them; for the fundamental and controlling utilities in the case are economic and not legal. The law simply crystallizes the industrial facts as it finds them.

The legal possession, in the hands of capitalists, must not lead us into the grave error of thinking that capitalists are at liberty to do what they please with what they may call their own. It is to be presumed that they are at one with the laborers on at least one point: both parties are engaged in a common purpose of industrial production. They therefore desire the highest efficiency. Their self-interest, therefore, compels them to reward effort in proportion to efficiency. Doubtless the duty of deciding who is efficient has been assigned to the parties in whose minds the elements of Time and Space have received the highest recognition, for such persons are most competent to perceive what actions do and what do not further a most advantageous combination of these elements. If, however, possession and calculation were in the hands of the laborers, or of the state, the apportionment of income among the classes would be the same. In other words, capital and labor, whether in the largest sense or in the sense of particular industries or businesses, must, in the long run, be remunerated according to their efficiency.

"Efficiency" is not, however, a simple term. It is to labor precisely what the term "value" is to commodities. Just as value is an equilibrium between the respective desires of exchangers, so is efficiency an equilibrium between the respective efforts of producers. In the case of efficiency, as in the case of value, if it is absolutely necessary to apply a large amount of work, that amount of labor must be repaid. Hence we might further expound the theories of wages and of value by tracing the influence of necessary labor or "cost."

TOPIC X

The Wages the Farmer has to Pay for Common Labor

(*a*) If the price of produce is high and hence apparently remunerative to the farmer, will that enable the laborer to compel the farmer to pay higher wages? Could higher wages long be forced up in farming, while mining and other similar pursuits pay less?

(*b*) Would you expect wages to be higher in Colorado than in Nebraska? If higher, is the difference due to the different employment, i. e., mining, or to difference in environment, e. g., higher cost of living?

(*c*) To what extent are the wages in farming independent of those in other employments?

(*d*) To what extent will greater industry on the part of farm laborers raise their wages at once, and ultimately? To what exten will improved agricultural improvements do so? Will they raise or lower wages immediate or ultimately?

(*e*) To what extent will high cost to the laborer of his living enable him to force up wages?

(*f*) What effect will the number of laborers applying for employment have upon their wages in farming, and then in all employment taken together? Could there be many in farming and few in spinning at the same time? How long a period do you mean by "at the same time"?

(*g*) Can there be at the same time high cost of living to farm hands and low cost to spinners, or vice versa?

(*h*) Do improvements in agriculture raise spinners' wages or farm hands' wages?

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Boehm-Bawerk: bk. VII, ch. II.
Andrews: sec. 30 and n. 3.
Davenport: Elements, ch. IX.

TOPIC XI

The Wages that Manufacturers of Spool Cotton have to Pay for Common Spinners

(*a*) Does the fact that the spinner does not cultivate the soil like the farm hand put him at a disadvantage with respect to the latter in obtaining food? (See topic X, (*h*).) Does he have an advantage in obtaining spool cotton for his private use?

(*b*) Do our previous studies furnish us with any grounds for looking upon all "day-labor" in whatever employment as a class possessing common interests and fortunes?

(*c*) In cotton spinning does a larger volume of business decrease the price of thread? Do agricultural products decrease in price as their volume increases? Does the difference in the nature of these businesses affect the foregoing reasoning as to the equalization of wages on the farm with those in the factory?

(*d*) Do improvements in spinning-machinery benefit spinners, employers, or farm hands? Immediate and ultimate effects.

(*e*) Will a rise in money wages of spinners immediately benefit them, or cause, through increased demand, a corresponding rise in the price of their necessaries?

(*f*) What changes in the *direction* of the production of the country are necessary in order that "real wages" or necessaries and other advantages received by laborers rise with money wages?

(*g*) If business is bad do wages fall?

(*h*) If the manufacturer fails, do the spinners necessarily lose their wages?

(*i*) Then do wages come directly from the product?

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Clark: Philosophy of Wealth, ch. VII.
Hadley: sec. 354.
Davenport: Elements, secs. 64, 65.

TOPIC XII

The Wages the Manufacturer Pays His Foreman

(*a*) Is a foreman more of an assistance to the manufacturer than to the laborer? Is he paid because the manufacturer wants him or because the laborers want him? Is he paid in proportion as he is needed?

(*b*) Do foremen form a class by themselves? If laborers receive less, do foremen receive more? What personal characteristics must a foreman have different from those of a laborer?

(*c*) Are foremen naturally "smarter" or are they children of parents who have taken more pains with their education? How about their adaptability?

(*d*) In what proportion to each other are foremen and laborers needed?

(*e*) Show in what way the above considerations would tend to make the wages of foremen higher than those of laborers.

(*f*) Do foremen's wages tend to an equality in the same factory? In different factories? How do they differ in this respect from laborers?

(*g*) Do they take any risks of the business? Are they to be classed rather with manufacturers than with laborers?

(*h*) If foremen's ability were commoner than laborers' ability, which would receive the higher pay?

(*i*) Does the foreman or the laborer stand a better chance in bargaining with the employer?

(*j*) Is each paid according to the physical *quantity* or according to the *value* of his product?

(*k*) Do foremen's wages "enter into" the cost of production? Why not do away with them and so reduce the price of the product?

REFERENCE

Marshall: bk. VI, ch. VII.

CHAPTER V

SPECULATION

THE preceding chapters were intended to prove that the industrial relations of men tend toward regularity, so that, under given circumstances, we may expect them to be influenced by well-ascertained motives in the distribution of wealth. The idea was advanced that there is an industrial principle analogous to the physical principle of balancing, compensation, equilibrium, through which rates of exchange of commodities or of services are established; and that the force which acts in, upon, and through the industrial equilibrium is the desire of men for each others' products and services. The conception was made more definite and practical by the addition of the consideration that men's desires may themselves be analyzed according as they participate more or less in the onward movement of civilization. Thus we postulated the two classes of capitalists and laborers. It is true that the activities of men are a cause as well as an effect of the onward movement of civilization; and hence it may seem that we have, by making the same persons the subjects of economic law and the causes of progress, i. e., of the action of a certain law, reasoned in a circle, and thus offended certain logicians. In other words, the progressive classes cause progress, but were caused by the state of civilization. But it

is not reasoning in a circle to select a single category, like economic life, from the whole mass of social phenomena which environs it, and then to look upon the condition of that environment as a cause of the various classes of incomes.

The question now arises (in the popular mind, at least) whether it is *right* that the natural* laws existing should be "permitted to act," and whether persons do *right* in acting according to those natural laws or in participating in the operation and maintenance of those laws. Is the market price a just price? Are market wages just wages? Economists have been fond of asserting that their science has nothing to do with right or wrong; it is merely a method of establishing the nature and mechanism of industrial laws. But, since it can be of little use to establish such laws unless they enlighten our sense of justice and guide the actions of the citizens and of the legislator, it is useless longer to hold back from frank discussion of the moral question. It is possible that the doctrine of morality evolved from economic study may help out the general principles of ethics.

In the first place, we shall doubtless agree in renouncing *intuition* as a proper basis and sanction of moral action. Doubtless our actions do actually follow intuitions, partly hereditary and partly acquired. We are creatures of habit. We rise, attend the shop and the market place, and retire, with regularity, uniformity, and naive spontaneity. But our actions are, nevertheless, explainable from our circumstances and

* "Natural," not "statute," laws.

surroundings, and thus disprove the technical doctrine of intuition, which is not a positive statement that we act spontaneously, but is a denial that causes are to be ascertained for our actions at all.

In assuming that we act as we do because we ourselves are the result of circumstances, the difficulty still arises of distinguishing right from wrong action. It is at this point that the historical studies of recent years have been most useful. The impression has become a strong one among historical students that what is right at one time is not necessarily right at another: the whole system of guilds, of villeinage, of official price-lists, may have been very useful in an age of slow communication and narrow markets, when ability to make a machine was popularly regarded as a sort of necromancy, and when the laboring population was too improvident to be trusted with capital. "A Yankee at the Court of King Arthur," with his proposals for drastic and revolutionary measures, would justly have been looked upon as a most dangerous character. The conclusion was naturally reached by historians that every social period, and, in fact, every distinct society, is composed of a mass of coordinated phenomena, which are neither to be approved nor condemned, but which are to be regarded as symptomatic of a stage of progress. From this the further conclusion easily follows that individual actions are to be praised or condemned in so far as they do or do not conform to existing institutions and practices. Thus the man who would be looked upon by one race as physically normal might be despised as feeble by the

people of a more vigorous race; the man who acts upon the belief that he can fly is looked upon as crazy by people who do not believe flying is possible, although, as soon as flying machines were invented, he would be regarded as an inspired prophet; the laborer who lives in squalor is now looked upon as an object of charity or of sociological experiment, whereas a hundred years ago people would have been astonished at the suggestion that it might be possible for a man of his class to live better; when wheat is selling at a dollar a bushel, the man who gets two dollars a bushel is looked upon as a lucky child of fortune, and when wheat is selling at fifty cents a bushel, the man who gets a dollar is equally envied.

Thus, in each social category, there arises the conception of action which is *normal* to the society in question; and acts which are *abnormal* are, in a general way, condemned, while those which are normal are called "right."

The content of the word "right," however, is far from being exhausted by the normal conception. Where progress is being worked out, there abnormal action *must* take place with a view to a complete readjustment of all the social categories. "Reformers" come forward with utopian schemes, while large-minded men, in every walk of life, are endeavoring to introduce improvements and useful innovations. Evidently such persons are not to be condemned and branded as sinners. It is equally evident, however, that their actions belong to a different class from those of the persons who simply conform to what is

normal. If the normal and the progressive man both act "rightly," then the word "right" has two meanings. We may agree in applying the word "wrong" both to the non-progressive abnormal man and to the would-be progressive, but utopian man.

Much confusion has arisen from using the word "right" indiscriminately for that which is normal and for that which is progressive or ideal; and it is not too much to say that a large part of our practical inconsistency, of the hypocrisy with which Englishmen and Americans are charged by people of the Continent, and of the glaring instances of inconsistency between preaching and practice, are traceable to this confusion of thought with respect to what is right. Thus we condemn cannibals theoretically, but no judge would think of ordering one cannibal hung for eating another cannibal; we preach against Sunday trains, but Sunday trains will continue to run so long as they are useful; and we thunder against dancing, but the sermon does not ring in the ears the next evening. Now, each person is entitled to his own conception as to what is ideal in the matter of the meat he eats, or the days on which he travels, or the methods of social recreation, and it is proper that he should have ideals upon these subjects; but it is evident that these ideals have nothing to do with what is normal at the moment.

It is to be carefully noted that the distinction just made does not lead to the doctrine that "whatever is, is right." No such doctrine could ever satisfy a careful thinker. The expression, "whatever is, is right,"

omits to mention precisely that which is the essential characteristic of the real doctrine inculcated, namely, the *normal* or *relative*. The doctrine might, however, be stated in the following form: "Whatever is *normal*, is right."

Let us now apply the principle of normal right to the gainful activities of man. Nothing is more common than for persons engaged in one gainful occupation to accuse those engaged in another of following a dishonest calling. One example is the common habit of sneering at lawyers; another is the charge that consumers are robbed by middlemen; another is the very bitter feeling among farmers against grain speculators. Unquestionably, illegitimate business transactions are far too frequent; the only question is whether there is anything in the word "speculation," as commonly understood, that will help us to distinguish the good from the bad, or whether it is not rather *degree* of speculation which establishes its desirability. The word "speculation" has so wide an application that to attempt to use it in a narrow sense as synonymous with bad speculation or gambling leads to confusion. In fact, in the French and German languages this word has a good meaning. We shall think more clearly, then, if we first inquire whether speculation in its broadest sense should be abolished, and, if not, *how much speculation* is desirable.

It will readily be perceived that the total abolition of speculation would amount to the total cessation of those perpetual adjustments and readjustments of

the forces of production, exchange, and distribution which have formed the principal object of our attention. Where are they absent from the industrial world? The retail dealer is busy with his "bargain sales," his purchase of bankrupt stocks, his risking the carrying of a larger stock and a wider assortment; the jobber studies the wants of his district, its tastes, its comparative willingness to pay for a genuine article or its preference for something cheap and shoddy; the manufacturer seeks cheap supplies, labor-saving machinery, and by present losses hopes to gain a wide market and permanent sales. All of these parties are liable to be disappointed in their calculations—just as liable as is the workman looking for a job. Perhaps no business is more risky than farming. The vicissitudes of the seasons in a single locality, and the uncertainty whether those vicissitudes will be aggravated or compensated by vicissitudes in other localities, render farming a most uncertain occupation. When we look at the boards of trade and at the stock exchanges, we find that the uncertainties connected with operations in those institutions are not, after all, so much greater than those of other businesses. Those who hold for a rise, protect themselves against a fall by selling "short," and those who sell "short" protect themselves against a rise by present purchases. Industrial, like other progress, depends upon experiment. Inventors and promoters benefit mankind more often than themselves. Silver, gold, and salt mines, fruit farms, irrigating works, all suggest to the mind many misfortunes and only possible success.

The element of uncertainty exists as truly in all the industries mentioned, although not in so high a degree, as it does in gambling and betting. A most uncertain industry is the apparently benevolent one of keeping a private school. The opening day of the school decides for the year whether the master gains or loses.

So far there will probably be no desire in any quarter to question our conclusions; and further, the popular statement is not incorrect if it says that the test of legitimacy is not uncertainty but robbery. The test is whether each man bears his own losses, or makes gains at the expense of others. But this test is not a simple one. It seems simple to the popular mind, but it is really vastly complex. What is or is not robbery can not be left to the judgment of the party interested. It is small exaggeration to say that no bargain ever took place in which each party did not think that one or the other got the better of it.

The analysis contained in the preceding papers shows that as the market becomes larger the market price becomes more and more important, and the rates of wages and profit tend to become more and more uniform. This means that with increasing complexity and sensitiveness of the social organism, there is evolved an increasing perfection of equilibrium. This equilibrium is normal: it is the result of existing forces. It is not ideal: it is possible to imagine or theorize about higher wages and lower interest, and smaller or larger profits. It may be that the realization of such imaginings would be a "better" state of

things. It is certain, however, that conformity with the existing normal prices, wages, interest, etc., is not "wrong" when practiced in a particular instance, and that conformity with less developed norms *is* "wrong."

The principles of normal right are thus shown to be applicable to the conduct of particular businesses. Within those businesses, the question as to whether a bargain involves robbery is decided from the public point of view to be a question, not of private judgment, but of normal equilibrium. There remains, however, the further question of the legitimacy of the business itself. Why is gambling wrong and farming right? Is it right to deal in debts, stocks, bonds, and "futures"? It is idle to contend that this inquiry is outside of the domain of the economist. Like the questions of exchange and distribution, it is the original stimulus which impels to economic inquiry, and the science of political economy falls short of its original scope and aim if it does not continue its labors until it has rendered the final answer. The question of the legitimacy of a business will be subjected to the test of normal reasoning in the next paper.

TOPIC XIII

The Income of a Physician

(*a*) What tendency would it have, if any, to move up and down with the wages of laborers? with those of foremen? with employers' profits?

(*b*) Is it shared with anyone or derived from a source, like a business income which is shared among many?

(*c*) Do not those who employ a physician virtually share *their* income with him?

(*d*) Is there any sense in which he shares *his* income with them, or at least his personal wealth, i. e., services?

(*e*) In what way does his education raise his pay? Suppose he is unsuccessful. Is there any sense in which his failure aids to the success of rivals?

(*f*) Can we distinguish the size of the fee from the size of the practice? Practice varies more than fees.

(*g*) The large practice of the few induces many to practice who can not succeed.

(*h*) Can we look on all physicians as a sort of a guild? How are they united for common gain? How does the total need for their services affect their total incomes as a class or guild?

(*i*) Mention other cases like that of the physician.

(*j*) On the whole, is there a difference in principle between the forces which apply in this case and those in the last three?

(*k*) What do you understand by "merit" and "efficiency"?

References

Marshall: bk. II, ch. IV, secs. 11-13; bk. VI, chs. IV, V, sec. 7.
McLeod: Theory of Credit (second ed.), ch. XI, sec. 6.
Mill: bk. I, ch. I, sec. 1.
Davenport: Elements, secs. 28-30.

TOPIC XIV

The Gains of an East India Merchant One Hundred Years Ago

(*a*) How long was the voyage? What was the knowledge of the market in China? What was the knowledge of what the market would be at home when the ship returned?

(*b*) What was the need of a supercargo?

(*c*) The sailors often had a share in a successful voyage; so in whaling. This form of partnership between owner and sailors belongs to a stage of industrial development prior to that of fixed incomes.

(*d*) Danger from pirates.

(*e*) Was the trade with Eastern peoples always free? How about the East India Co.? The African Co.? Was there not in these adventures an element of roobery?

(*f*) Was there an element of gambling? Was not a capitalist in complete suspense for a long time as to whether he would lose or win?

(*g*) If he won, what was the moral justification for his profits? Take the standpoint of the then existing circumstances.

(*h*) Would such gains be looked on as right now? Is there really any sense or consistency in such a supposition as this one of judging former conditions by existing standards?

(*i*) Do we conclude that we look upon the present methods of business as more right than the old because they are *necessarily* adapted to modern conditions?

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Hadley: chs. IV, V.

Wells: Recent Economic Changes, ch. II, esp. p. 32.

Cunningham: Growth of English Industry and Commerce, vol. II, secs. 206, 207, 254-6.

TOPIC XV

The Profits of a Firm of Corn Buyers Who Own Elevators Along the Railroad Lines

(*a*) Can they calculate more or less closely on what they will have to pay and on what they will sell for than the merchant in the last paper?

(*b*) Do they mean to buy when prices are low or high? How about selling prices?

(*c*) Does buying when prices are low tend to lower them further or to raise them?

(*d*) Does selling when prices are high tend to raise them further or to lower them?

(*e*) Are calculations in (*b*) (*c*) (*d*) any more to be condemned when about large sums than small ones, in Chicago than in Wahoo?

(*f*) What power have corn buyers to *conspire* to lower prices to the farmer? on the Chicago board of trade? If it is to the advantage of some speculators to lower prices, will it not at the same time be to the advantage of others to raise them?

(*g*) What power have farmers to *conspire* to raise prices? Have farmers influence with the legislature?

(*h*) What fixes the price of corn? (cf., topics VII, VIII.)

(*i*) The corn buyers produce no material goods *directly;* do they perform any useful service? Would farmers get better prices if each one shipped to the central market? Would consumers buy cheaper?

(*j*) Grain may lie stored in a corn dealer's elevators over one season; is this necessarily an evil for a producer or a consumer?

(*k*) Owing to the fact that certain natural forces may not be controlled by man and that industrial and commercial conditions are so complex that the ordinary human intellect fails rightly to analyze them and to understand the tendency of temporary movements or general development, there is a great element of uncertainty in all business.

(*l*) What is dealing "in futures"? buying and selling on "margins"? What is the danger in the first? the second?

(*m*) Will the corn buyers make a more "regular" profit than the merchant of topic XIV?

(*n*) Is this business more or less of a "gambling" operation than that?

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Emery: pp. 105, 109, 113, 131, 137 (arbitrage) 159, 163, 166 (normal profits).

Andrews: sec. 21, n. 7 (speculation tends to make prices steady).

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Mill: p. 417 (arbitration of foreign exchange).

Davenport: Elements, secs. 112-127.

TOPIC XVI

The Dividends of a Stockholder in a Railroad

(*a*) How does the income (dividend) of a stockholder in a railroad differ from that of a manufacturer of cotton cloth? Does it involve longer or shorter time-calculations? If it were greater, would not capital be withdrawn from manufacture, and vice versa?

(*b*) Does investment in railroad stocks involve greater risk than in manufacturing? (The capital invested is fixed, can not be changed.)

(*c*) Is it possible, if the railroad is the only one allowed by law, that the monopoly was necessary in order to induce capital to take the risk?

(*d*) Do railroad dividends include wages of superintendents? Do profits in manufacturing?

(*e*) The value of the stock is established by the degree of success of the road; the first stockholders gain or lose.

(*f*) When the value of the stock is established, we have a "regular investment."

(*g*) How does the investment differ in its *legitimacy*, its *regularity*, its *morality*, its *legality* from the profits of the firm of cornbuyers? (topic XV) and from the gains of the East India merchant (topic XIV)?

(*h*) Is it right to apply the tests of one hundred years ago to the business of to-day, or the standards of to-day to the business of one hundred years ago? Environment.

(*i*) Does railroad competition lower rates? Give an example of railroad rates and railroad dividends within your observation.

CHAPTER VI

INDUSTRY

In beginning the second half of this series of essays, it is well to note a general shifting of point of view, which marks what is really a new grand division. The public point of view is still maintained. To drop it, would be to abandon the science of economics. The study of the conformity of prices to a market or normal price involved the public point of view *negatively* rather than positively, by the exclusion of the individual's efforts and satisfactions as in any way a measure or test. In the questions of value and income with which we have had to deal, the positive interests were those of persons and of classes, or at least of commodities. But henceforth the public point of view will appeal to us *positively*. The question is to be one of *general prosperity*. We are primarily to envisage the whole community and to follow its successes and failures. The two grand divisions are those commonly denominated "exchange" and "production." The distinction, however, is not so complete as is generally supposed. Each discussion involves the other.

It is, therefore, entirely natural that we should follow the (distributional) discussion of just prices with a (progressional) inquiry into just businesses.

The element of Time was a potent means in our analysis of the calculations that enter into value; in the following discussion it will play a still more important part. It was then chiefly important in allowing us to describe and classify the participation of individuals in industry. It is now important in allowing us to classify businesses as participants in progress. We may look upon Time as symptomatic of the whole industrial environment. In the first place, the length of calculations normal to the period in question indicates the stage of advancement at which industry is arrived; in the second place, different environments occur at different times as well as at different places, and thus, in a rather more superficial sense, time indicates the historical sequence of progress. It is also true that different environments do exist for different classes and individuals at the same time and place. But into this refinement there is no reason at present to enter: it has already been partially treated in connection with the different industrial classes.

It has been seen that a business is not to be condemned simply because it involves risk. In fact the demonstration has gone to the point of showing that some risk is inevitable. With reference to the present, there certainly is such a thing as undue risk. It makes little difference whether the business man invests his own money or that of others intrusted to him in the form of private loan or in the form of stock subscriptions. The man who enters into an industrial enterprise with bad judgment will lose his money and that of the persons associated with him and confiding

in him. Perhaps the losses will extend to persons who are not proprietors, or loaners, but merely dealers on credit. To the extent to which they have sold to the promoter or speculator, they must be viewed as sharing in the business and its losses. The loss to the individuals is a loss to the community.

There is, however, a marked difference in the amount of risk that it has been customary to incur in different historical periods. Down to the end of the Middle Ages, the serious business of life was war. The promoters who took risks and responsibilities were kings and captains. Economic conditions were subordinate to political. With the opening of modern times, however, the fixed economic relations of men were rapidly relaxed. The interests of capital and labor became greater than those of political dominion. Mobility was introduced into industrial society, and alongside of the old political system arose an economic system which silently but surely superseded it. The battleground of adjustment, contention, risk, differentiation, progress, and evolution was now economic. In the risks of industry men imitated the risks of war. Piracy and commerce went hand in hand. Kings subscribed their private treasure to buccaneering expeditions; merchant adventurers dreamed of the wealth of Ophir. *In those times these means of money-getting were legitimate.*

Since these were the principal means of money-getting, accumulating capital found its way into them. The investors took tremendous risks and were profoundly ignorant about what was done with their

capital. Probably the best means of helping them was that of state interference. Companies were chartered, and their powers and duties were defined by the state. The stockholders thus acquired a definite right of accounting against those to whom they had entrusted their funds. Thus monopolies arose. In fact, monopoly was the only conception of industry and commerce natural to the medieval mind. The political dominance of the Middle Ages had accustomed men to arbitrary rule and had concealed the existence of a normal equilibrium. At the present day, demands for arbitrary prices and for state interference and distribution are a relic of medieval notions—conceivably useful when conservatively applied, but deeply injurious when held up as an ideal.

These monopolies, which, as has been remarked, embraced the whole field of wholesale trade, did not exist because the state knew more, but because individuals knew less. Because men were ignorant, short-sighted, and inexperienced, they were as yet incompetent to maintain nice equilibria of prices and wages. Somehow, in rough fashion, they accomplished a rude uniformity in the face of great vicissitudes and through help of the antiquated machinery of politics. Gradually the adoption of improved mechanical processes afforded the physical means of a nicer adjustment. Quicker communication, wider markets, and myriad-form products afforded the opportunity to develop individual foresight, individual knowledge, and individual business relations. Each man of means swung loose from a state interference to which he no longer

looked up, and embarked upon his individual enterprises, upon his individual responsibility. The result has been greater certainty and uniformity. They are surely mistaken who claim that the general tendency of progress has been towards state monopoly.

It appears, then, that decrease in business risk has gone hand in hand with decrease in state interference; the wild speculation of the seventeenth century has disappeared, and along with it the chartered trading company. It is well, however, to repeat the proviso that there may, somewhere in the world, at the present day, be found an environment which duplicates that of the seventeenth century, and where seventeenth century methods are still legitimate.

A further stage of progress, however, is to be recorded. The transition from the early chartered trading companies to complete individual initiative is not yet finished. The necessity for a combination of capitals will always exist. But the form of this combination, as well as its working, are less and less those of monopoly. Vast aggregations of capital are controlled by a single director or manager, because the technical conditions of production require such concentration; but his foresight surpasses infinitely that which was exercised by the state-controlled monopolies of the earlier periods. Although the capital at his disposal is great, the world of capital is greater still. And even if he be enabled to gain a temporary advantage for the parties who have trusted him, he fears to excite a reaction which may ruin him and them. Obstinately to maintain an advantage in prices

at the expense of the consuming public will gradually, and sometimes very swiftly, arouse forces of competition that will overwhelm and ruin his enterprise. The problem of the successful manager is that of so judiciously adjusting his tariffs as not to arouse the avenging arm of competition of the giant Capital. On the other hand, the system of credit allows the individual investor easily to withdraw from the enterprise, and thus to control the manager's relations with him. The spectacle presented is, therefore, not one of state interference or of *arbitrariness,* (which is the real evil buried in the word "monopoly," as used nowadays) but one of ever-increasing delicacy of adjustment and of competition.[1] The modern corporation, instead of being the means of throttling competition, is really a form of its growth. It retains, it is true, many characteristics of the earlier period. Just as the old state corporations borrowed their form from the political life that existed before the economic period arose, so the great capitalistic enterprises of to-day retain some of the forms and defects of the period of state corporations. They still exist not so much by their wisdom as because the wisdom of individuals is less. They still are tempted to take advantage of a brief authority and to oppress the weak and confiding. The direction of the development, however, is away from reliance on the state and towards individual responsibility.

1. The word "monopoly" has economic significance only in so far as it indicates an interference with normal equilibrium of values, or of incomes ("competition"). Undoubtedly serious disturbances of this kind do take place, largely through the short-sightedness of would-be captains of industry.

It may, therefore, be asserted with confidence that the test of the legitimacy of a business in general is the risk that it involves. Beyond a certain point risk is unnecessary and therefore wrong. A buccaneer adventurer would be now not only wicked but ridiculous. Any new enterprise is wrong if not reasonably assured of success. It is the duty of persons introducing novelties to go through careful experiments with a view of ascertaining the practicability of manufacture and the probability of stimulating a sufficient demand. On the other hand, risk is still unavoidable within reasonable limits. The undertaking of risk with a view to the widening of the field of investment is extremely laudable, providing all the parties concerned are fully aware of the possibility of loss, and provided they are willing and able to bear the whole loss upon their own shoulders. Nor is it unreasonable that those who invest in a mine and take the chances of the lode's "petering out" should be allowed unusual returns if it prove unexpectedly rich, or that those who adopt a new method should make more than average profits until others have been enterprising enough to make corresponding improvements.

The test of business progress appears to be the development of business calculation. It becomes more and more common to foresee business events. Failure to make a reasonable forecast is abnormal; and while it is impossible to state just how long a calculation must be to be normal, business calculation probably has some connection with a conception already common among economists—that of a *normal period of*

production. It is quite certain that the period for which capital is invested in manufacturing has greatly increased in modern times, and it may be affirmed that the period for which calculations may be reasonably made can not be shorter. It has not yet been possible to assign any particular number of years as the normal period of production and calculation for the present economic epoch, but it may be asserted as a principle that Time of calculation is the normal test of the legitimacy of business enterprise. Calculations that are abnormally short are abnormally precarious; the same is true of those that are abnormally long, for they are visionary.

TOPIC XVII

The Interest Received by a Holder of Railroad Bonds

(*a*) How does this case differ from those of topics XIV, XV, and XVI? Is the burden of risk changed? Is the loaner or capitalist absolved from all risk? What resemblance does he bear to a wage earner in this respect?

(*b*) Describe the almost insensible gradations in regularity, risk, certainty of calculation, and necessity for provision from topic XIV to topic XVII.

(*c*) Suppose the limiting case of no risk on the part of the "capitalist," would he still receive "interest?"

(*d*) Would he have accumulated capital if he did not expect to receive interest?

(*e*) Would people pay interest if they could get capital without other people furnishing it to them?

(*f*) Can a man get more as interest than can be produced by the capital when actualaly used for production? e. g., can the bondholder get more than the capital will earn when put into the form of a locomotive or railroad track (barring, of course, cases of loss from miscalculation in industrial technique or from disaster)?

(*g*) Can loaners of money on farm mortgages in the long run get more than the farmers produce? If less, how much less? Can they gain more, in the long run, than purchasers of stock or railway bonds?

(*h*) Can the same capital be as easily loaned to a farmer as to a railroad?

(*i*) Can there be one rate of interest (apart from risk) on farm loans and another on railroad loans?

(*j*) State the principles regulating the rate and justice of interest.

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Marshall: bk. III, ch. V; bk. VI, ch. I, sec. 9, ch. VI.
Mill: pp. 217, 221.
Hadley: secs. 299-313.
Boehm-Bawerk: bk. VI, ch. VI; bk. VII, ch. I.
Jevons: ch. VII.
Walker: part IV, ch. III.
Davenport: secs. 109-119; Elements, ch. VIII.

TOPIC XVIII

When Does a Corn Speculator Gain at the Expense of Other People?

(*a*) What is a "corner"? Is it a mere buying in expectation that prices will rise or selling in expectation that they will fall? Cf. topic XV. Is it an open buying on the market?

(*b*) Do not speculators in corners try to obtain superior knowledge of the real supply, to keep that knowledge from others, and to buy secretly? Could there be a gain otherwise beyond that of topic XV.

(*c*) Do corners rely upon "free competition" or upon restriction of the competition?

(*d*) Are they best cured by restricting competition and "fixing" prices by law, or by facilitating competition?

(*e*) A large amount of "money," i. e., capital, is needed in order to create a corner. If speculators could not borrow, could they even attempt such an operation?

(*f*) Are corners often successful? Mention any successful corner that you have known of.

(*g*) If a corner is successful, to what extent is the public robbed? By the excess over what the price ought to have been?

(*h*) How high ought the price to have been? Would it have been a right and just price if competition had been free, i. e., if there had been a general knowledge of conditions?

(*i*) If some people are "smarter" than others, ought they to gain more?

(*j*) If a "speculation" succeed, is it the public or other speculators that lose?

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Hadley: secs. 118-124.

TOPIC XIX

The Selling Price of a Painting by an old Master Inherited by its Owner

(*a*) How high a price can the owner compel the public to pay? Can any other seller step in to reduce the price? Is the buyer *compelled* to pay the price?

(*b*) Apply the same question to the fare on a city street car; to a railway which has the monopoly; to the owner of the "visible supply" of corn on which he has affected a "corner." (It is a practical question.)

(*c*) Which is likely to net the larger income, a large number of small fares or a small number of large fares?

(*d*) Is it more economical for a city to be served by two gas plants or by one?

(*e*) In the case of the painting, is there any ground for saying that the buyer has lost or the seller has gained over their positions before the sale?

(*f*) Is there in all cases just ground for saying that the buyer is in a worse position, and the seller in a better, than they would have been in if there had been a "competition" of sellers—several sellers instead of one? (See topic I.)

(*g*) In the case of the street railroad, may not part of the monopoly fare be legitimate compensation for risk? Cf. topic XVI. May it not also have been paid for as the price of the franchise? Do you know of any cases of this sort?

(*h*) What resemblance does the corner in corn bear to topic XIV? Is it easy to make such a "corner"? Is it easier in a small market than in a large one? Is it easier to corner corn or gold or butter or potatoes or steel rails or cotton cloth?

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Von Halle: Trusts or Industrial Combinations in the U. S.
Newcomb: Financial Policy of U. S., p. 28 (hard to corner gold).
Ely: Monopolies and Trusts.

TOPIC XX

What are the Motives that Characterize the Industry of the Farmer?

(*a*) To satisfy the primary wants of himself and family.

(*b*) To expend active energy, to have the pleasure of doing, a pleasure of mastery, a feeling of power—affected by public opinion, by the "social mind," and perhaps by love for the soil.

(*c*) Is (*a*) or (*b*) a predominant motive with the farmer? Compare in this respect a corn-speculator; a banker; an inventor; a goldminer; a clergyman.

(*d*) Does the farmer satisfy all of even the primary wants with the produce of his own farm? How about corn, wheat, potatoes, beans, pease, beef, mutton, pork, eggs? Few New England farmers raise their own wheat. How about shoes, stockings, and clothes? How about newspapers? How about distant transportation of self or goods? Give examples from your observation.

(*e*) Is the farmer more "independent" than the mill-hand?

(*f*) If the farmer does not make the boots he wears, is there still any sense in which they are the product of his labor?

(*g*) Is there a sense in which everything he consumes is the product of his labor?

(*h*) Is there a sense in which everything he buys at the store is a product of his labor?

(*i*) Is there a sense in which what he makes and sells is the product of the labor of the purchasers?

(*j*) Suppose he does not pay his debts, will he not have consumed the product of somebody's labor?

(*k*) Can the amount of money in circulation (whether at the moment large or small) release him from working for what he consumes?

(*l*) Can a change in the amount of money in the community create goods for his use? The goods he consumes have been produced by somebody.

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CHAPTER VII

INDUSTRIAL CENTERS

In our inquiry into the elements of economic progress, it would not be improper to invade the family circle and even the solitude of the isolated housekeeper. The activities and pleasures of the latter might be studied and the saving care with which he betters his material condition might be exhibited, as if he were the prototype of a nation of teeming millions. As the inquiry, however, would necessitate the analysis of an individual into a little industrial society all by himself, it is perhaps simpler to begin at once with a real society.

The statement is common and true that a political economy first appears with division of labor. Of course division of labor can only appear with growth of population. It is, perhaps, not wholly illogical to say that division of labor is the cause of economic phenomena; a better explanation, however, is that "division of labor" is a short term which tersely calls to mind every generalization that one may have attained with respect to social industry; in other words, it is *symptomatic* of all industrial characteristics.

To the superficially curious, the term implies simply a number of interesting *physical* facts which have already been closely associated with the element of Time. (See chapter II, Steady Prices, page 13.)

Instead of each person or family supplying all his wants, he devotes himself to manufacture—that is to say, he produces one article. In the production of a single article, at a further stage of development, each operation is performed by a separate person. The family ceases to be a manufacturing group, but, on the contrary, many families become dependent upon each manufacturing group, and their wants are supplied by the goods obtained in exchange for its products, of which they themselves frequently make no use at all. The groups naturally produce that for which they have the greatest advantages, either from their own skill or from opportunities of climate, soil, or mineral or other natural resources. They are thus necessarily separated, sometimes at great distances from each other, and can enjoy each other's products only by means of railways and steamships, which thus bring to each group the products of all others. The mere fact that human beings must have light and air prevents them from huddling close together. Division of labor tends to bring closer together the members of a single group, but draws the different groups apart from each other. The tendency of any one group to become too large for human comfort may be counteracted by progressive subdivision of labor within the group.

The growth of division of labor is caused by the experiences which men have of its advantages. The enormous increase of production is the common fact adduced in its favor, although persons with a tendency toward short-time views are to be found who

think that the great increase in production is an argument against it, since they imagine that it affords means by which some persons may take advantage of others. All agree, however, that without division of labor none could have the opportunities which many now enjoy, for the products must be in existence before they can be utilized by any one. Persons of an objective and hopeful temperament perceive in division of labor a continuation of the plan which Nature has so admirably executed in organic life. The simplest organisms are a sort of jack-of-all-trades: they use the same physical means indifferently for alimentation, excretion, oxidation, and locomotion. In the highest forms, special organs perform these functions. There seems to be no limit to the extension of this principle. It is symptomatic of progress. Granting that man's spiritual nature limits his grosser wants, it may safely be asserted that, within these limits, material wealth indicates progress, that division of labor is the cause of material wealth, and that the organic law of specialization of function is manifested in division of labor.

Industrial centers are therefore characteristic of physical division of labor. But division of labor, in the aspect of it heretofore considered, hardly rises into the sphere of economics. It is merely a generalization of the technical facts of production. The increased material product is physically affected by a complex organism of boilers, belts, pulleys, and cranks. Economics, however, is essentially a study of motives and of human actions. To the economist, it

is these of which division of labor is symptomatic rather than physical facts. Capital, credit, and values are not technical but economic matters. Machinery can only be *produced,* in the first place, by men who are willing to abstain from consuming all, perhaps, that they need for comfort. It can only be *maintained* by men who are willing to abstain from consuming in present enjoyment more than their income; and it can only be *increased* by those who are willing to curtail their present enjoyments still more. Economic Capital, therefore, consists in the attitude of mind and the motive by which men recognize the relation of capital-goods—the aforesaid boilers, cranks, etc.—to their material welfare, and act upon the belief in this relation; and since industrial men may exchange their goods so that what is capital-goods in the hands of one may become consumption-goods in the hands of another, and the reverse, it appears that the important economic fact is not so much the form and substance of the material goods as the intention of their momentary possessor with respect to them. As we measure the total wealth of society not by the pounds or quarts of goods which it possesses, but by the utilities and enjoyments which the goods afford, so we may say that the capital of a country consists not of technical arrangements of production, but that it is a pure fund, a single productive machine, consisting of the intelligent foresight, prudence, and industrial temperance of men. Capital is therefore a characteristic of man, objectified in the use of machinery. Without it, industrial centers could not

exist. It is as necessary to technical processes as they are to it. Division of labor, therefore, is symptomatic of capital as well as of machinery.

The isolated producer does not exchange. In a somewhat less primitive economy, it may be imagined that different processes of production are begun simultaneously, occupy a considerable time, and are simultaneously completed. In this case there will be no occasion for exchange during the production period, and all exchanges will take place simultaneously at the end of the period. The fact, however, is very different from what we have imagined. All processes are not of the same length, nor does the intermittent output of goods correspond to the length of the period of production. Indeed, some products, like flour, flow in a continuous stream during all the hours of working. But it is convenient that those engaged in later processes should find their raw materials ready at the beginning. Merchants have their active seasons of trade, and agricultural crops are gathered only at harvest-time. Since all have need of the products of each, and since those products neither can nor conveniently should mature simultaneously, it follows that the very structure of industry demands that, on the average, those who finish goods should not be required to replace the raw materials before the process is completed. It is, indeed, common for that portion of the capital-goods which consists of machinery to belong to the manufacturer. But whether this be so or not, the value of the products can be only such as to allow him to replace the raw materials and the

wear and tear which belong to those specific goods and not to some earlier or later lot of goods. For if those goods were devoted to replacing the cost of another lot of goods, then presumably the cost of the first lot is not replaced at all. If, therefore, the outlay is made by the manufacturer himself, it can not be replaced until the goods are finished; and, by parity of reasoning, if made by another person and sold to the manufacturer, it can not either be replaced except at the end of the process. Industry, therefore, could not proceed did not society *wait* for finished products wherewith to replace expenditure previously incurred. The fact, however, that people are continuously selling and buying conceals this great economic truth of Waiting. We visualize the exchanges of the market-place but are blind to the Protean changes that take place behind factory walls and the time conditions that qualify them.

Industry could not proceed for a moment were it not that producers firmly believed that a use would exist for their goods when produced, and were producers and consumers not at hand to purchase raw materials and final products. Undoubtedly there is involved the moral quality which people chiefly have in mind when they speak of "honesty," "confidence," and "trust"; but the *economic* quality is that attitude of mind and motive which leads men to understand these time-necessities of productive exchange, and to act accordingly. In the economic world, therefore, Credit consists in a quality of men by virtue of which they produce special goods in the confidence of being able to exchange them.

Industrial centers, therefore, connote a series of phenomena which progressively rise from the material to the psychic world: they connote, first, local and personal specialization in production and physical channels of communication; secondly, those qualities of foresight, intelligence, and self control which cause men to create and keep in repair the special technical tools of production—the qualities being called Pure Capital, and the tools Capital-Goods; thirdly, the habit that industrial men have of recognizing in practice the fact that different products must be ready at different times in order that the whole technical process of production in society may proceed as a unit—Credit.

Since different processes are carried on by different men, it can readily be shown that credit is symptomatic of the fact that different producers have adjusted, or are trying to adjust, their operations harmoniously for social production. It thus happens that the field of credit is the scene of the chief legal relations of men.

Capital and credit are functions of time; they enter necessarily into all the cases of value which we have studied as involving time; they are the essentially economic categories suggested by the terms "Division of Labor" and "Industrial Centers."

TOPIC XXI

What are the Advantages of the Elgin Watch Factory Over Domestic Watch Industry?

(*a*) Domestic industry prevailed in Switzerland: contractors or "capitalists" bought the different parts separately, from the families that made them.

(*b*) Does the modern factory produce more?

(*c*) More watches or more value?

(*d*) More per workman? What is the part played by machinery? What is the cause of greater productiveness—capital, skill, or a new arrangement of tasks? Can increased productiveness in a factory be said to be due to a greater productiveness of *labor?*

(*e*) Are watches produced by the factory cheaper than, and as good as, those hand-made?

(*f*) If so, must the wages of the factory workmen be lower than those of the domestic worker?

(*g*) Must the capital invested be larger?

(*h*) Is it possible that the higher value of *total product* should reward both capital and labor more highly? Or capital less and labor more? Is the profit per watch larger or smaller in the factory?

(*i*) Would it be possible for the Elgin factory to thrive if the market for watches were small?

(*j*) Does the size of the market cause the industry to change from domestic to factory, or does the change cause the market to enlarge?

(*k*) If you know how many watches sell for a high price, can you predict how many will sell at a low price?

(*l*) Are the employees of the factory more "oppressed" than were the domestic workers of Switzerland, i. e., does the factory render them less free? Compare the "sweaters" of one of our large cities. Does the management of delicate machinery render men more or less careful and trustworthy? Will a drunkard be long retained in the Elgin works? Did it make so much difference to the Swiss capitalists as it does to factory owners whether the domestic workers were temperate?

(*m*) Is there more mutual helpfulness under the new system than under the old?

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TOPIC XXII

What Has Been the Influence of the Erie Canal Upon the Wealth of the United States?

(*a*) Where is the Erie Canal? What does it carry east? west?

(*b*) What are the motives that cause men to send and bring these things?

(*c*) Does it increase your wealth to get what you want? How about whiskey? How about Dakota wheat? Nebraska corn? Marquette iron? Houghton copper? Boston crackers? Lynn boots? New York ready-made clothing? New Jersey leather and pottery? Pittsburg steel?

(*d*) Is it better to have a lot of small industries in each town, or a few large ones? Why do we find textile industries in Lowell and Fall River, Massachusetts; iron in Pennsylvania; fruit in Florida, Delaware, and California? Why are similar businesses in great cities located in the same quarter of the town, e. g., the lawyer's offices all together, the leather dealers together, the importers of dry goods together, a retail district, a wholesale district, etc.?

(*e*) Why is the seacoast first settled and prosperous?

(*f*) Why is a country more prosperous that has many bays and rivers?

(*g*) How do canals and railways resemble bays and rivers?

(*h*) Is not a prohibition of trade equivalent to the disuse of the bays and rivers?

(*i*) Does it make any difference in this respect whether the prohibition be of internal or foreign trade; i. e., if trade be prohibited between two parts of the same nation, will the effect be

different, except in degree, from a prohibition of trade between two nations?

(*j*) Do you think better roads will benefit your county? Can the county afford to build them?

(*k*) Show that the difference between an isolated country and one that enjoys free communication with the rest of the world is like that between house industry (topic XXI) and factory industry.

(*l*) Are English factory hands better off because they can buy American meat? Are American farmers better off because they can not buy English cloths?

(*m*) Can the concentration of industries be carried too far? How about "trusts" and monopolies?

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TOPIC XXIII

The Constitutional Prohibition of the Several States to Lay Customs Duties Against One Another

(*a*) If each state laid such a duty, would its production be the same in kind and quality as if it laid a uniform income or property tax?

(*b*) Would a change in kind or quality induced by customs duties tend to increase the value of the total production of each state?

(*c*) Would it thus be possible to increase the total wealth of the United States?

(*d*) If it would have such a tendency, does it not follow that all the counties should levy duties against each other? All the towns? Thus the nation would become still richer.

(*e*) Is it not a great convenience to be able to send goods from New York to San Francisco without having them inspected and taxed at every state line? Would not such an interference itself be a heavy tax on industry? Sending in sealed cars under bond would not obviate all inconvenience.

(*f*) Is there a bare possibility that one state might get the advantage of the others in customs duties, and thus actually "make money" out of its duties?

(*g*) Could some states make money in this way except at the expense of others? Is such an advantage to be encouraged? Is it not a "monopoly" which can only be destroyed by free competition?

(*h*) If a state could possess such a monopoly against others, would it not probably be also true that the advantage from it would accrue to individual monopolists at home?

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CHAPTER VIII

A RICH COUNTRY

THE elements of national prosperity, like most other matters difficult of analysis, are assumed in popular discussion. Perhaps it is more exact to say that the existence of a national prosperity which is subject to waxing and waning is assumed without attempt to analyze it into its elements. In the period of predominance of politics, before that had been subverted by the rise of economic activity, even the best writers saw in foreign conquest and in the tribute of conquered states the explanation of national wealth. And even after the reversal in the relative importance of politics and economics, to which allusion was made in chapter VI, writers reflecting current economic views looked upon foreign commerce as a sort of economic means of gaining a political tribute. No one suspected but that the state must decline which failed to receive in commercial exchange more than it gave. While this proposition holds true under the most recent theories, the then current explanation of it was untenable; for it was not sought to compare the utility of the things imported with that of the things exported to a nation in question, but the foreign nation was unnecessarily brought into the problem. It was naively assumed that the same things have the same value to all people, and that, therefore, if nation A

obtains more value than it gives, nation B must part with more value than it receives. Nation A could not gain unless nation B lost. No discussion of value had, however, actually arisen. Men were conscious only of physical quantities exchanged, and while it is absurd to deny that an ounce of watch springs may be worth more than a hundred pounds of pig iron, the reason for this difference did not enter into theory, and the theory of exchange suffered in consequence.

Long experience, however, taught men that commerce is mutually beneficial, without regard to physical standards. A science of economics clearly disengaged itself from the general mass of political and social discussion, and a theory of value appeared as the central feature of this science, through which the mutual gains of trading were explainable. The theory of prosperity must needs now abandon the foundering wreck of the Political-Tribute-Idea. With Smith and Quesnay it boarded the fair frigate of Industry. It was the question of *luxury,* the discussion of which gave the impetus for the change. Since the bugaboo of impoverishment through foreign commerce had been sent to limbo, men's thoughts turned more towards domestic conditions, and abnormal tendencies in production and consumption became the center of gravity in discussions of national prosperity. Writers who clung to the form of the old foreign trade theory infused into it the new spirit by explaining that imported articles mostly were luxuries. Perhaps this was truer then than it is now.

The whole discussion as to the sources of national welfare having thus been brought by a process of slow evolution, in which men have gradually accepted hints from the logic of events pressing thick and fast about them, to a rational economic basis, the way is made easier for an inquiry into the nature of wealth. If we turn to popular usage, we find that the term is used quite variously. In speaking of the "wealth" of a man, we exclude rigorously his personal qualities, even if they bring in a large income. The income is wealth, the qualities are not. His wealth is something, perhaps, that he acquires with his qualities. If the qualities are merely potential, they have not given any satisfactory evidences of their existence. On the other hand, in speaking of national prosperity, the capacity of citizens to produce even the least tangible products of character or morals will often fall within the term "national wealth." The qualities are the heritage of the nation; they can not exist without manifestation; to name them is sufficient to indicate the chief source of national prosperity. The weight of usage, however, leans toward the narrower use of the term, from the simple fact that wealth is conceded to be characteristically a term of economics, and that weighty reasons of logic demand that the material elements of prosperity be reserved for a distinct discussion and a distinct science.

The line between wealth and capital can not be exactly drawn. Wealth includes a series of economic goods which, beginning with capital as the most durable, because reproductive, descends on the principle

suggested in the last paragraph, through a series of less tangible goods, until the limit of the tangible is reached, and, with it, the limit between the economic and the other moral sciences. Economics, however, is a "moral" or psychic science, for tangible goods simply indicate the extent of the "moral" or psychic interests involved.

Perhaps nothing will better illustrate the psychic nature of economic science than a brief inquiry into the reasons why the temperate zone is more wealthy than the tropics. The statement is often made that anything is an article of wealth which saves to men trouble, exertion, and fatigue. This statement will be seen to need much qualification. In the tropics men do not need warm houses or costly heating appliances. They do not need warm clothing, and, in many localities, nutritious food is produced at a very small expense. And yet every one will admit that, notwithstanding that the tropical climate enables vast amounts of labor and of preparation, indispensable in the North, to be dispensed with, nevertheless the people of the tropics are not the richer thereby. Several reasons may be adduced. Since the people of the tropics are not exposed to the cold, they do not *appreciate* the advantages of their situation. The people of the North do appreciate the privilege of warm clothing and houses. A condition of wealth, therefore, lies in *appreciation.* Wealth consists in tangible goods as a matter of delimitation of the science of economics. But unappreciated wealth is not wealth, for it lacks the necessary relation of things

to men. There can be no wealth without a wealth-user.

A more fundamental explanation of the poverty of the trppics lies in the further consideration that the gratuitous supplying of one set of wants there has little or no influence in the stimulation of efforts to supply other and different wants. The question here is not precisely that in the last paragraph, for there we inquired whether we can properly say that what Nature supplies spontaneously is in all cases wealth. Here we inquire why the people of the tropics are not richer than they are? This is not a matter of definition, but a question of cause. In the temperate zone, man attains to comfort through exertion. An activity of mind and body is thus established which survives the attainment of its original object. The satisfaction of old wants makes room for new ones. That is true to a certain extent in the tropics also. But in the North the activities aroused move forward spontaneously to the satisfaction of the new wants; they do more; they go ahead of the wants, lead them on, educate them, and thus increase man's capacity for enjoyment and broaden the variety of his experiences.

It is no chance, then, which has made the people of the temperate zone energetic and wealthy and the people of the tropical zone indolent and poor. It is by no chance that a people can not be rich without labor, for where the activity necessary for the creation of wealth is lacking, there the appreciation necessary for its enjoyment is lacking also. Production and consumption are two mutually necessary constituents

of man's activity, and an environment favorable to the one can not, in the long run, be unfavorable to the other.

The tropics are no more favorable to consumption than to production, since they neither vary, refine, nor increase men's wants. Man may be analyzed into a producing part and a consuming part; but those two parts can not be separated from each other. The man who produces more than he consumes does so in order that he may consume more in the future.

The whole discussion may be summed up as follows: when Nature renders a given amount of effort unnecessary, man is the richer thereby only if he apply the effort so saved to the supplying of some other want; if, however, he is content to accept Nature's favors as an absolute gift and relief from *all* effort, and as involving no obligation to maintain even his previous degree of effort,—in that case he unavoidably becomes poorer.

We conclude, therefore, that the very fact that the inhabitants of the temperate zone obtain the necessaries of life by much capitalization and labor entitles them to be considered as more wealthy than the inhabitants of the torrid zone, where necessaries are provided by the spontaneous bounty of Nature. At the same time, we admit that there is a very narrow and momentary sense in which the latter may be said to be the richer. But can the wealth of the people of the North increase in proportion to the increase of the physical means of satisfaction? The satisfaction of the necessaries of life is a satisfaction of crude and

gross wants; when these demands have been met, more refined wants spring up. In general, it may be said that the more refined wants make a less demand on physical instruments. The wants of art and literature involve but little consumption of material goods. The artistic nature makes little demand for even the first necessaries of life; and yet its impalpable satisfactions are valued incalculably more than the gross necessaries. What, then, is to be our conception of wealth in the North? Economics is the science of man's relation to his material satisfactions. Must the economist claim that as a country becomes civilized it must increase in material means of satisfaction to an endless extent? That would be to claim that the peculiar phenomena in which he is interested should sometime swallow up the whole of social life—a narrow conclusion, proving that the thinker has been mastered by his ideas. And yet this error has been not uncommon. Carl Knies says*: "It is an ancient and deep-rooted conception of political economy that the very trunk and branch of all its investigations consists only in the question: How may it be brought about that the greatest possible quantity of material goods be produced within a society? The country appears almost like a colossal storehouse for which the people so strain their powers as to exert to their utmost body and soul in order to bring into existence the greatest possible number of new goods, by means of which to produce still more new goods, or to trade with other nations." Another German professor, C.

*Der Credit, II, p. 149.

J. Fuchs[2] with reference to the Manchester school, writes: "It looks upon the cheapest possible creation of the greatest possible quantity of material goods, especially the cheapest possible creation of necessaries of life and of the raw materials of industry, as the peculiar province of economic activity on the principle: 'to buy in the cheapest market and to sell in the dearest.'"

If this definition of wealth, which the writers cited condemn, is to be consistently followed, the rational economist must hope that the production of wealth will stop before it has gone very far. If wealth, however, consists in articles of *value,* he may trust that advancing civilization, by lowering the value of what is material and increasing the value of what is immaterial, may ever advance in wealth, although the process may seem to result in destroying the material or physical basis of the science of economics.

2 Die Handelspolitik Englands, p. 149. Cf. G. von Mayr, Die Pflicht im Wirthschaftsleben, pp. 10–11.

TOPIC XXIV

How Does One Become Rich?

(*a*) This question presupposes the ordinary state of civilization and industry.

(*b*) He begins by efforts.

(*c*) Trace his progress from wage-laborer to boss, to small contractor, to large contractor, or to partner or proprietor.

(*d*) At each stage does he displace somebody else? If he does so, is this wrong?

(*e*) Even if he displaces some person, does he not benefit others? How? Distinguish between rivals and customers in this respect.

(*f*) Show how the enterprise and ambition of individuals, acting in this way throughout the whole of society, will cause a growth of social wealth.

(*g*) Has the typical rich American benefited or injured his country by his career from farmer-lad up and on?

(*h*) Does such a man grow rich at the expense of others? If he buy, can he be said to take others' produce any more than he gives his produce to others? If both have produced more than they had before, then both are richer before the exchange as well as after. They only exchange in order to consume, or in order to produce more. There is a sense in which they consume their own produce. (Cf. topic XX.)

(*i*) If a business man sells out and then buys land and rents it, is he entitled to the rent? Is it right to confiscate his rent because it is a "surplus" and an "unearned increment." Suppose the man of whom he bought had really not earned the rent, is the buyer bound to give up his land to the state? Is the seller bound to give up his purchase-money? As land is constantly changing hands, is this procedure practicable? (All this is on the supposition that unearned surplusses are not a proper subject of private property.)

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TOPIC XXV

How Does Society Become Rich?

(*a*) The same supposition as in the last paper.

(*b*) Give a resume of the way in which individual enterprise over the whole field of industry is spread over the whole field of consumption and satisfaction; in other words, is there not much truth in the proposition that private effort, industry, production, and improvements have a natural tendency to better the conditions of persons who are neither producers nor consumers, directly, of the particular product involved?

(*c*) Is social wealth any thing else than the means by which, on the average, the wants of the individuals composing society can be satisfied? The individual is the end as well as the user of the means. "Society" is simply a short way of looking at an average condition and action of individuals, who act in concert. We study concerted action.

(*d*) Does society become richer through speculation? Distinguish different kinds of speculation. (See topic XV.)

(*e*) Does society become richer through rent?

(*f*) Enumerate businesses which add more or less to wealth. Does distilling add less than brewing or spinning? Is there any difference so long as the business is a habitually patronized business? If people want whisky and get it, are they not rich to that extent? Is rent-taking a business? Is stock gambling a business?

(*g*) Is a river social wealth? A good climate? Does it belong to any one?

(*h*) Do you think of how much a thing will buy when you think of social wealth, or do you think of how much good it will do? Ultimate or immediate?

(*i*) Are good laws social wealth?

(*j*) Can any laws make a people industrious? If people do not work, is it not because they are prevented rather than because they need encouragement or assistance?

(*k*) Is it not true that assistance must come from without, while hindrance may come from within? But society has no outer region to draw upon; hence it must fall back upon its own individuals.

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TOPIC XXVI

What Is Wealth?

(*a*) If all a man's desires were satisfied would he be wealthy?

(*b*) Is it possible to satiate a man so that new desires will not arise?

(*c*) Can a lazy man be wealthy except by chance? Are you sure he had so many wants until he got the property and learned how to use it?

(*d*) Can a lazy society have wants except as they are successively aroused by their activities?

(*e*) Are a people inhabiting a warm, fertile, enervating country so likely to become rich as a people inhabiting a bracing and less fruitful region?

(*f*) Does not wealth, then, depend as much upon our activities as upon our desires?

(*g*) Is wealth anything more than purchasing power? If we speak of the wealth of society, do we mean what it can buy from another society, or what it is able to enjoy, (1) because it can furnish the objects of enjoyment; (2) because it has capacity to enjoy them?

(*h*) How far has existing society advanced in its grade of activities, and in its capacity of enjoyment?

(*i*) At the present state of advancement, what relation have you found to exist between the activities of the individual and of society? If society sets a standard to the individual, what influence has he, in return, upon society?

(*j*) Are not initiation, invention, direction, ambition, just as much activities as hoeing, digging, chopping, sawing, cording?

(*k*) If the state assumed the initiation, invention, and direction, would it not take away some of the individual's most precious activities? Would any form of wealth be likely to increase so fast? Is the supposition practical?

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CHAPTER IX

LUXURY

With advance of science, its logical requirements are more exacting. At early stages, men are satisfied with direct and simple answers; later on, they require answers to answers; and there seems no limit to the process. At any given moment, however, a limit is found in what is recognized as the momentary field or scope of the science in question. The truth of this law of evolution of applied logic is amply attested by the growing complexity of thought on the subject of Luxury. The simple treatment of the subject satisfied only for a moment, after which it served as a provocation to countless objections and inquiries rather than as a final solution.

The old and naive view of luxury was characterized by the static or narrowly logical method that pervaded the beginnings of all science. As was noted in the last paper, questions of prosperity turned about luxury. Men were interested in the relations of production, population, and surplus; and the long series of authors whose work is epitomized by Mill found a simple, static, and logical solution of these relations in the greater or less prevalence of habits of luxury. Of course, a moderate development of theories of exchange and value was necessary in order to prove the interdependence of industrial men; and, this amount

of social solidarity once established, nothing was easier than to show that the welfare of the poor necessitated that the rich abstain from luxury. Convincing as this argument is, it fails to satisfy; for the answer is essentially materialistic: if a capitalist abstain from drinking wine, the value of the wine may be applied more beneficently. In a typical and desirable case, it will be reinvested, that is, it will give food to laborers who will produce further wealth. There is a less desirable case which, however, is still preferable to the capitalist's drinking the wine himself: if he do not drink it, a poor man can. This explanation, however, halts upon a dreary, materialistic level; for we have offered to us nothing better than a prospect of unlimited oatmeal porridge consumed by capitalist and laborer alike in the zealous and laudable design of producing more oatmeal porridge.

As above hinted, dissatisfaction with this explanation is, on its logical side, to be referred to its statical or narrowly logical nature. What we want is an explanation that will really satisfy our conviction that luxuries are injurious, and will, at the same time, recognize the patent principle that, other things being equal, no product ever has been or ever will be created too good, too rich, too beautiful, too costly, for men to consume. It at once occurs to us that while everything but oatmeal porridge was to be classed as luxury in an obscure Scotch town a hundred years ago, it may be perfectly possible that our porridge is metamorphosed into a tuneful mahogany-case piano to-day.

Our problem then consists in conceiving of the question of luxury as one of a *moving equilibrium.* We may profitably mention some of the forces which, change though they may, must counterbalance each other with great nicety in order that society may advance without impediment from the evils of luxury. Such a conception will be more truly kinetic and organic, and will allow full play for man's psychic aspirations.

In order to analyze the conception of luxury as a moving equilibrium, we must divide social activities into various categories, each of which is itself in motion and striving for equilibrium within itself, and between itself and the others. For instance, it is evident that an important condition affecting the conception of luxury is to be found in the comprehensive group of social wealth. In a rich community, it would seem that there is nothing reprehensible in many indulgences which would be unpermissible in a poor community. In the last analysis nothing can be said to be reprehensible that does not injure man's physical or moral well-being. Were all goods spontaneously supplied the standards of indulgence would be physical and moral, but not economic. At any point short of spontaneous abundance, goods possess an economic as well as a hygienic, moral, etc., character. They are approved or disapproved according as they conduce to economic well-being; and hence the classification of goods from this point of view will vary greatly with the wealth of a society. The study of luxury is thus different from a study of value. In

the latter study, we are indifferent as to the ultimate effect of different goods in increasing or decreasing wealth. The inquiry is not whether people choose foolishly or wisely; the inquiry simply is as to what part their choices, such as they actually are, play in the mechanism of value-adjustments. The question of luxury, however, is a question of destiny; it is proper to inquire as to the effects of different classes of goods on further production. This was the point of view of the Physiocrats, who claimed that cultivation of the soil was the only industry that really increased social wealth. In a sense, this was true of the France of a hundred and fifty years ago. The few manufactures were such as the people at large could ill afford to purchase, and *for that reason* were properly regarded as luxuries. But the England of that day was more industrial, and hence Adam Smith assigned to manufactures a productivity which Quesnay denied to them. In other words, the body of the English people, poor as they were, *could afford* to live better than their neighbors across the Channel. The physical wants must first be supplied; but when they are supplied, all anxiety about them ceases, the center of gravity of economic interest passes to the more refined wants, and, as they are successively supplied, they cease to become matters for anxiety or for possible reproach.

A further analysis of the conditions of luxury may be made by considering the different goods in use at each epoch as forming an harmonious group. Of course, the reason why the different members harmonize at the given epoch, and not at others, is to be

traced to a thousand mental and moral influences. Moreover, there will be goods out of harmony with the rest, and those will be either goods which are falling out of fashion because they are unable to survive from an earlier epoch, or goods that are too refined for present conditions of production. The normal men of the epoch will readily acquire a taste for those goods which the subjective and objective environments require, so that the normal consumption will *seem* to be the result of free choice, while it *is really* imposed by the environment. Thus, the Argentinian, although feasted by Delmonico, secretly longs for his jerked beef, and the Yankee for his cornbread. The consumption of goods that do not belong to the epoch-making group is immoral and hence luxurious. Such a good is, of course, possible of production, but the conditions are such that its production interferes with the production of the other goods. This interference, by rendering the latter more difficult of acquisition, increases at once their importance, because they lie closer to the physical basis of our existence, which, during our terrestrial life, at least, is indispensable to a moral, aestheic, and intellectual superstructure. Inharmonious indulgence is immoral from the very fact that its effect, under the conditions of the epoch, is bound to be an attack upon the physical basis of the whole social structure.

The conditions of consumption just considered are evidently themselves closely interwoven with conditions of production, which are, however, logically to be treated as another set of influences entering into the

equilibrium of luxury. Wants and their satisfactions should develop progressively from the physical to the psychic; but it does not follow that they will do so, without, at least, severe struggles and reverses. Technical efforts to satisfy wants are not sure to follow the path of uniform progress. They may leave broad gaps in the industrial structure and thus render it unstable and shaky. A simple illustration will suffice: all will agree that the want for coarse food is more physical and primary than that for common woven goods. Accordingly, a broad view of industry for the last two centuries will probably show that improvements in agriculture were prior to those in weaving. Nevertheless, when the great inventions in weaving took place, the price of cloth fell rapidly, and great misery existed among weavers. Finally, with the abolition of the Corn Laws in England, and further improvements in agriculture and in transportation, bread-stuffs again fell in price, room was made for the production of finer goods, and the world at last began to feel the full effect of a new and more psychic combination of products.

Such a combination of goods at any epoch constitutes a Standard of Living for that epoch. *A luxury may be defined as that want-supplying good the use of which violates the epoch-making Standard of Living.*

TOPIC XXVII

A Rich Man Keeps a Yacht; Does His Expenditure on it do More Good Than Harm?

(*a*) The sailors are benefited.

(*b*) The guests are benefited.

(*c*) The makers of yachts, champagne, etc., are benefited.

(*d*) Will the rich man grow rich as fast as if he reinvested in his business what he spends on yachts?

(*e*) If all rich men spent all their surplus on yachts, would society grow richer?

(*f*) If they spent all their surplus on "business," would society grow richer? (Cf. topics XXIV and XXV.)

(*g*) Is there no room in society for yachts? How many yachts ought there to be?

(*h*) Is the wealth consumed by the sailors replaced by them?

(*i*) If all individuals in society consumed wealth and did not replace it, how long would there be any wealth at all?

(*j*) Is the champagne consumed on the yacht replaced by the labor of those who consume it? Is it the *product* of their labor? (See topic XX.)

(*k*) Is it conceivable that all persons produce champagne alone?

(*l*) For wealth to grow in society there must be a *variety* of production.

(*m*) There must not be a production for present gratification, but a production for *future* gratification.

(*n*) Future gratification includes the pay and support of labor in the future, i. e., necessaries.

(*o*) The *idea of luxury*, then, includes that of the production of present gratifications.

(*p*) Connect this with the *idea of morality*.

(*q*) Do the building and use of the yacht benefit the poor *in time of trade depression?*

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TOPIC XXVIII

What Is Capital?

(*a*) Is a yacht or a house hired out capital?

(*b*) Is a factory capital? Machinery or buildings?

(*c*) Is a river capital? or is it "land"?

(*d*) Is land capital?

(*e*) Capital is associated with "business," not with "rent."

(*f*) It is associated with future satisfactions.

(*g*) Is the wealth spent by the rich man on his yacht capital? (Topic XXVII.)

(*h*) Is it moral to consume all wealth as fast as produced or discovered?

(*i*) Is it more moral to provide for champagne drinking next year than to drink champagne at once?

(*j*) Is it still more moral to provide for necessaries, or at least permanent or artistic products next year, provided present necessaries are at hand?

(*k*) Present value depends upon present preference regardless of morality; future values depend on a moral act.

(*l*) Would you infer from the above discussion that capitalists are immoral persons?

(*m*) In a socialistic society would not some one have to do what the capitalist does? Would he probably do it better than the capitalist now does? Can we look on the capitalist as an agent of society to provide for the future?

(*n*) How do you know that capitalists are paid too much for their services? (Cf. topics XVI to XVIII.)

(*o*) Have there always been capitalists? What difference is there between development, growth, history, on the one side, and revolution on the other?

(*p*) Is not free individual action self-government? Can there be any government except self-government?

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Boehm-Bawerk: bk. VI, ch. V. (Proportion of amount of wealth to period of production.)

Marshall: bk. II, ch. IV, esp. sec. 6, n. 1; bk. IV. ch. I, sec. 1, and especially ch. II, sec. 1.

Hadley: secs. 297-301.

Davenport: Elements, ch. XII.

TOPIC XXIX

Of What Good is Convict Labor?

(*a*) Do convict laborers compete with industry?

(*b*) If convicts did not labor, would they cost more to the state?

(*c*) If they cost more, that means that more taxes are levied.

(*d*) If they compete, how long will the competition last?

(*e*) Those who suffer from competition will produce something else.

(*f*) Are idle convicts more likely to reform than busy ones?

(*g*) Is it better for them that they do something useful, or that they work a treadmill?

(*h*) If the society in question is one where production is increasing, is it probable that the competition of convict labor will throw any one out of employment even temporarily—any more than newly invented machinery?

(*i*) If production is not increasing, the employment of convicts itself constitutes an increase.

(*j*) The man who produces supplies himself, although it may be through exchange.

(*k*) Is it not a gain to society for convicts as well as others to supply their own wants?

CHAPTER X

CAPITAL

We have already contrasted pure capital with capital-goods (Chapter VII, Industrial Centers). We shall now inquire further into what capital does and into the effect upon our welfare of freedom in capitalistic enterprise.

Capital and capital-goods bear a relation to each other in the industrial life of society somewhat analogous to the relation between the mind and the brain of an individual man. We have seen that capital reaches its most sublimated form in the quality of mind which enables a person, perhaps to deprive himself of present enjoyments, and, in any case, to calculate, contrive, and wait—with a view to increased future wealth. *Capital, then, is that means of production which is calculated upon.* This is the reason why land can be sharply distinguished from capital, from the social point of view, for land can be neither increased nor diminished, while machines are susceptible of indefinite multiplication. Of course this argument excludes the effect of the discovery of new land and of the permanent improvement of old land. The impossibility of changing the current endowment of heat and light of a given piece of land is sufficient to give a basis of reality to the broad distinction between

land and capital. Capital, therefore, obtains its characteristics, not only from the fact that it cooperates in production, but from the fact that it has to be produced first. Hence Roscher and others have defined capital as "the produced means of production."

Descending now in the psychic scale from the mind of capital to its brain, we imagine further how it is that capital-goods must be treated in order that they may accomplish their full effect. The constant aim is that the greatest production be attained. This is naturally, but perhaps not quite correctly, expressed by saying that we endeavor to make our capital as *productive* as possible. Our real meaning is that we regret the necessity of having any capital at all, and would fain produce without it, or with as little as possible, but are unfortunately compelled to employ it. Now, the doing away with capital involves the invention of new processes occupying either the same, shorter, or longer time. If the new process occupy longer time than the old, the probability is that more capital will be needed, but that the increased capital will give greater proportional returns, and hence less capital will be employed in proportion to the product won. The main object is to obtain the greatest possible return in proportion to the waiting and sacrifice. It does not concern society how great the waiting and sacrifice is so much as how great the return is in proportion to waiting and sacrifice.

The doing away with capital absolutely or relatively to product necessitates new inventions. Longer processes are usually different processes, and necessitate

additional machinery new in type. There is now in use more machinery than before, but the output has increased in still larger ratio. It is the opinion of Professor von Boehm-Bawerk that the latter is the normal case: in other words, that additions of capital necessitate inventions adapting it to longer time investment. Indeed, economists generally make the statement that division of labor and consequent use of machinery increase only with the widening of the market. Interest, according to Professor von Boehm-Bawerk, is dependent upon the decreasing rate in the increase of production from lengthening the time involved in the process. The eminent author has fixed his mind upon the technique of capital-goods and has extracted from this technique a technical rule. Back of it all, however, lies the desire of man to obtain the greatest results with the least effort, and this mental attitude, when we think of capital (the category in which it finds chief expression), is what is meant by the word "capital" in the phrase "productivity of capital."

There has been an active discussion among economists as to whether capital is, or is not, productive. Doubtless under the term "productive" is concealed a sense of moral approval, and thus the justification of interest is sought or attacked under cover. Now, if our point of view is purely technical and we are not looking for original or final causes—if we seek neither to blame nor to approve—we must admit that industrial products are due to the cooperation of nature, capital, and man. Further, if we compare the present

with the recent past and note that capital, for instance, is being more and more employed in proportion to land and labor, we must logically say that the greater portion of product is due to capital, and hence predicate "productivity" of capital. The effect of this substitution is to hand over a greater proportion of the total product to the owners of capital only in case the substitution in question involves more expensive capital-goods. And this is the assumption of Professor von Boehm-Bawerk. The opposite case, however, is perfectly possible. Consider, for example, what the wonderful invention of liquid air may do. Apart from its uses in surgery and hygiene (thus reducing the interruptions to man's labors through sickness), the universal reduction in the cost of fuel and the attainment of aerial navigation indicate the doing away with a vast amount of mechanism, railway tracks, and other expensive capital-goods, and thus the avoidance of great cost in capital-goods without any corresponding increase in direct labor cost.

Probably this industrial revolution would permit the survival of railway tracks for heavy freight and of other specimens of the present technical regime, just as all progress preserves within and about itself specimens of all prior stages of culture: the Lapp still survives in Norway, and the Bowery Boy still suggests to the New Yorker troglodyte days.

If, however, we look upon man as the beginning and the end of economic action, we may find in him the sole cause, and may choose to say that he alone is productive. Professor von Boehm-Bawerk prefers this use

of language, and in this respect he agrees with the socialists; but he avoids the difficulty of saying that capital, an unproductive thing, should receive compensation, a moral payment, by spelling mind-capital, or pure capital, entirely out of industry. Producers are paid out of the value of the product. If the product be a distant one, the present labor employed upon it may claim, indeed, the whole of the *future* product, but a less number of *present* goods, for the latter are more valuable. The work involved in making the capital-goods can not, therefore, claim the whole product, when the product is mature, for it has already traded away that product to capitalists for present goods at a time when those were more valuable.

It was early perceived that the laws of Production were technical, depending on principles of physics, chemistry, and their subordinate or cognate sciences, and hence to a certain extent independent of other social phenomena, which nevertheless might be classed as economic. It was then conceived that over against the activities of production were to be set the rights, privileges, and enjoyments of consumption, under the comprehensive title of Distribution. It was further conceived that distribution might occur quite independently of production; that man was at liberty to form "systems"; and that these systems might be made and undone at will by change of custom or by summary process of legislation. This conclusion is an error perhaps partly due to a confounding of method and observation. It is true that it is often convenient to divide economics into production and distribution

for the sake of analysis and generalization; but it is a complete error to assume that the phenomena so separated for the sake of argument are not, in fact, intimately interdependent. The truth is that the conditions of production present themselves readily to us in a static form: so much capital, labor, and land are required for production; the production period is so and so long; the law of diminishing returns has such and such effects; manufactures led fifty years ago, transportation is in the lead now.

On the other hand, distribution confronts us at once with kinetic problems. A static consideration of questions of rent, wages, and interest is so easily treated by rearrangements of income through proposed legislation as to arouse our suspicion. On closer inquiry, we find that the phenomena of production and distribution are in fact inseparable; that the laws of production are essentially dependent upon human activities and thought, and that the laws of distribution are intimately dependent upon the processes and technique of production.

Socialists say that people should be paid according to their needs, or, at least, according to their deeds; but this explains nothing. What are "needs" or "deeds" is either to be determined by scientific rules or is to be relegated to chance, fancy, and vagary. In the former case, those terms will themselves be found to connote a moving equilibrium in which the standard of living must be analyzed into a standard of production and a standard of consumption, the action and reaction between which constitute the standard of

living. This standard must again be subdivided into the standards of different classes and of different individuals, each of which sub-standards is again the resultant of more particular efforts and enjoyments. It will thus be perceived that the breaking up of a subject for the purpose of discussion is only safe if we remember that *the subject itself is not broken up.* Socialists treat society like a statute which can be reduced here and augmented there; but society is really like a living man, and the process of taking a pound of flesh nearest the heart is a static chimera.

TOPIC XXX

Is it Better to "Make Money" or to "Post" at the University?

(*a*) Because we study the relation of each individual to the common weal as it actually exists, does it follow that we think that that relation and that weal can not be bettered?

(*b*) The pursuit of science rather than of riches implies a change in the kind of material wealth produced. If all men pursued science, tastes would be greatly changed, and hence the nature of industries would be profoundly modified. How modified? Does not pursuit of science require material wealth? How would buildings be changed? Would we eat as much? As rich food? Would we wear as many diamonds? Would we work as hard or harder?

(*c*) Can a young man go to college unless some one (probably his father, possibly himself) has *produced* food, clothing, books, etc., for him?

(*d*) If many people changed their ambition from mammon to science, would so many have private yachts? Would more have sail boats? Might general pursuits of science provide yachts for all?

(*e*) If more people turned to art, would they be better, more useful, more helpful?

(*f*) In case all turned from materialistic pursuits, would there be so much envy? Would people quarrel about differences in wealth? Would there be a labor question? Would it make so much difference to a man whether he owned a fine painting or merely had the privilege of looking at it in a public gallery?

(*g*) Is there any power that can, through force, change the present state of fortune-hunting to a state of knowledge-hunting and action-seeking? Could a change of form of the state to socialism or to communism produce the desired result? Must not the golden age result from inner development of the individual? When that development has taken place, will there be any question of socialism?

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Marshall: bk. III, ch. VI, sec. 6.
Giddings: bk. I, ch. IV, sec. 2; bk. IV, ch. IV.
Clark: Philosophy of Wealth, chs. III, XI, cf. p. 44.

Patten: Theory of Dynamic Economics, chs. VIII, XI. (Fig. IV.)

Andrews: secs. 126-131.

Davenport: Elements, sec. 115.

TOPIC XXXI

Of What Good Are Strikes?

(*a*) Discuss the disadvantages of labor in dealing with capital. A few can act in concert better than many; a laborer can not spare his wares (labor) till their price rises; he can not easily transport himself to where wages are higher.

(*b*) In principle, organization of each trade is praiseworthy: trades unions, etc. Their action is more efficient and may prevent strikes, i. e., gain points by mere argument.

(*c*) If labor unions could guarantee the fulfilment of their agreements, might they not have the advantage over employers in bargaining?

(*d*) Are the disadvantages of labor in bargaining a symptom of those personal characteristics which set laborers off from capitalists originally? (Cf. Topic XXVIII.) Take the body of laborers generation after generation: can they be said to possess the more foresight compared with capitalists?

(*e*) Be careful to distinguish mere individual instances from the broad average.

(*f*) Do the suspicion and distrust of laborers aid or hinder their negotiations?

(*g*) Whose funds do the laborers have to draw upon to increase their salaries? How large is the fund?

(*h*) If laborers knew just how much the funds were, would they be better satisfied? Will they believe what their employers say about it?

(*i*) Is it exactly fair to the employers to force them to show their accounts?

(*j*) Will not an improvement in human nature on both sides, more philanthropy of capitalists and more confidence of workers, help much?

(*k*) Will a socialistic organization of the state change human nature, or must a change in human nature precede?

(*l*) Can you give instances where the laborers have had their employers at a disadvantage?

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Clark: Philosophy of Wealth, ch. IV.

Clark & Giddings: "The Modern Distributive Process," ch. IV, esp. sec. 6.

Hadley: secs. 393-404.

Mill: p. 183; bk. II, ch. III.

Cairnes: part II, chs. III, IV.

Walker: Wages Question, ch. XIX.

Davenport: Elements, sec. 129.

Marshall: bk. VI, ch. IV, sec. 6.

TOPIC XXXII

Of What Good are Usury Laws?

(*a*) What is the exact meaning of "usury"? Is all interest usury? Is extortionate interest usury? Is it only usury to demand more than the statute allows?

(*b*) How did the legislature, in enacting a usury law, know how much it was fair to charge for a loan of money or capital?

(*c*) If the legislature followed the market, what need to pass any law?

(*d*) If the legislature did not follow the market, did it mean to favor debtors?

(*e*) Can the legislature succeed in this last-named attempt? If the market rate is necessary to bring forward the needed capital, would not obedience to the law withhold the capital?

(*f*) Does not the law, then, tend to raise interest on illegal loans, and to prevent legal loans?

(*g*) Does this state of affairs promote either wealth or morality? Is there any other standard of a just rate, then, than that established in free market? If "money" (i. e., loan capital) is badly needed by parties, should they not be allowed to pay what it is worth to them?

(*h*) Are there cases of usury where people pay more than a thing is worth to them, i. e., people who are incompetent to judge, who are under compulsion or menace, who are not really free agents? Is not this real "usury"? Must not a court of law in each such case determine whether a stronger has taken advantage of a weaker? The circumstances prove that there was

no "market," no "competition," no freedom of action in such a case.

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Roscher: I, secs. 53, 113, 192.
Boehm-Bawerk: Capital and Interest, bk. I ch. I.

APPENDIX

PARTIAL LIST OF WORKS ON ECONOMIC HISTORY

FOR TEACHING ENGLISH ECONOMIC HISTORY

H. De B. Gibbins, "Industry in England," 474 pp., Scribner's, 1897.

A shorter work is "Outlines of English Industrial History," abridged from W. Cunningham, 259 pp., Macmillan, 1895.

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W. Cunningham, "The Growth of English Industry and Commerce," 2 vols., 771 pp., 714 pp., Cambridge University press, 1892.

Thorold Rogers, "Work and Wages," 591 pp., Putnam's.

Thorold Rogers, "The Economic Interpretation of History," 947 pp., Putnam's, 1889.

W. J. Ashley, "English Economic History," 2 vols., 227 pp., 501 pp., Putnam.

There is no good book for teaching American Economic History, unfortunately. However, "The Industrial Evolution of the United States," by Carroll D. Wright, 362 pp. Chautauqua Press, 1895, may be used with profit.

Wright's "Practical Sociology," Longmans, 1899, 431 pp., offers a large amount of information about the United States which is applicable to economic purposes.

OTHER USEFUL BOOKS

Benj. Rand, "Economic History since 1763," 567 pp., John Wilson, Cambridge, Mass., 1892.

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